DOCUMENT RESUME

ED 120 928 95 EA 008 072

AUTHOR	Foley, Walter J.
TITLE	Educational Information Project. Final Report.
INSTITUTION	Iowa Univ., Iowa City.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C. Bureau of Research.
BUREAU NO	BR-6-1502
PUB DATE	Mar 68
CONTRACT	OEC-3-6-061502-0429
NOTE	191p.
EDRS PRICE	MF-$0.83 HC-$10.03 Plus Postage
DESCRIPTORS	*Computer Science; *Data Bases; Data Collection; Educational Research; Electronic Data Processing; Elementary Secondary Education; *Information Systems; Optical Scanners; School Accounting; Statewide Planning; *Student Records; *Systems Development; Technological Advancement
IDENTIFIERS	Iowa State Department of Public Instruction; Measurement Research Center

ABSTRACT

The CardPac System of Educational Accounting project developed instruments and procedures for collecting information about aspects of the elementary and secondary educational programs in Iowa. This project included the development of a bank of educational information that will transcribe, integrate, and store information centrally for purposes of research, evaluation, and service at the national, state, and local levels. Also developed were computer programs and data-processing systems for selecting, reducing, organizing, and disseminating the educational information needed by schools and other educational agencies to perform their basic functions more effectively. This includes retrieval of data in forms necessary to provide baselines statistics for program evaluation. Data collection cards that could be "read" by an optical scanner were used to gather curriculum, staff, and pupil information. (Author/MLF)

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Final Report

Project No. BR 6-1502

Contract No. OEC-3-6-061502-0429

EDUCATIONAL INFORMATION PROJECT

Principal Investigator: Dr. Walter J. Foley

The University of Iowa

Iowa City, Iowa

March, 1968

The research reported herein was performed pursuant to a contract with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

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Office of Education
Bureau of Research

EA 008 072

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SUMMARY

Problem

There exists in the Iowa public school systems an urgent need for more efficient data-collection procedures, for better ways of analyzing and interpreting data, and for reporting "digested" information back to the schools, for means of making the data collected centrally available for research, and for more effective utilization in research of the masses of data that can now be collected.

Objectives

A. The development of instruments and procedures for collecting information about all aspects of the educational program for the total population of elementary schools, including information about individual pupils, school personnel, school buildings, and school districts.

B. The development of a bank of educational information through data-processing techniques and systems. This bank will transcribe, integrate, and store information centrally for purposes of research, evaluation and service at the national, State, and local levels.

C. The development of computer programs and data processing systems for selecting, reducing, organizing, and disseminating the educational information needed by schools and other educational agencies to perform their basic functions more effectively. This includes retrieval of data in forms necessary to provide baseline statistics for program evaluation.

D. The implementation of the second administration of the Secondary CardPac System described in detail under a proposal submitted April 7, 1964, to the U.S. Office of Education and designated Cooperative Research Project No. E-031.

Methods

Data-collection cards which could be "read" by an optical scanner were used to gather curriculum, staff, and pupil information. For the first time in any state, the source of the information for a data-collection system were those directly involved in the educational process. The basic premise of the CardPac System of Educational Accounting is that pupils are the best source of pupil information, teachers are the best source of teacher and course information, and principals are the best source of instructional, fiscal, and physical plant information.

Findings and Analyses

1. Pupils and professional staff members in 1,097 of the State's 1,260 public elementary schools were identified. Materials either were not received from the remaining 163 schools, were received too late to process, or were in a shape making it impractical to attempt to process the information.

2. Each item of information collected at the elementary and secondary levels in three educational tracks--pupil, staff, and curriculum--was transcribed, integrated, and stored on magnetic tape in a central location. The use of optical-scan cards in collecting this information bypassed the time-consuming procedure of keypunching in that the items of information gridded on optical scan cards can be transcribed directly to computer tape.

3. Computer programs for retrieval of information mentioned in (2) above were written in Autocoder for the IBM 1401 Computer.

4. The CardPac System was able to provide four local school reports for the State Department of Public Instruction (Program Accounting A and B, Dropout Study, Pupil Activities Report, and Graduate Follow-Up Report) and also provided two reports unique to each local school ("Pupil Inventory Item Analysis" and "Relationships of Certain Variables on the CardPac Pupil Inventory and Other Pupil Data").

5. Refinements of the CardPac System based on 1965-66 experiences contributed to much smoother operation during 1966-67. Schools were more cooperative, apparently beginning to realize benefits from the system; there were fewer deadline problems, especially in returning materials at the end of the school year; and less editing of returned materials was needed at the Processing Center. Many of these improvements can be traced to the 56-page Administration Manual, which contained numerous illustrations.

I

INTRODUCTION

This project, funded under Contract No. OEC-3-6-061502-0429 for the period February 2, 1966, through June 30, 1967, continues the development and refinement of a statewide Educational Information System project originally funded under Contract SAE OE-4-10-242 for the period June 1, 1964, through November 30, 1965, and should be viewed in this context.

Essentially involved are the CardPac System of Educational Accounting at the secondary school level (grades 7-12) and the Elementary Pupil Accounting System (grades K-6), along with related activities, including an Educational Data Bank. Emphasis in this report will be placed on the former (the CardPac System), for two reasons:

1. It has been administered for two complete school-year cycles and is well documented, and
2. The Elementary System, although not as extensive, incorporates many of the same procedures as the Secondary System and thus a detailed description of one system (the secondary) suffices. In no way should this be interpreted as an effort to downgrade the elementary system; both systems are equally essential in a statewide educational information project.

Educational Information Problems

Why did the Iowa Educational Information Center--in conjunction with the State Department of Public Instruction, the College of Education of The University of Iowa, and Measurement Research Center--undertake such an ambitious project?

The answer is found in the final report on Cooperative Research Project No. E-031 for the initial developmental period as filed with the U. S. Office of Education following the termination of the original grant November 30, 1965. To reiterate, the problems in the area of educational information are not unique to the Iowa schools certainly. Public school systems, faced with an expanding pupil population in our increasingly complex modern society, require more and more information about that population. Teachers, supervisors, administrators, school board members, and parents need information about the individual pupil and about all factors affecting his educational development. The State Department of Public Instruction, U. S. Office of Education, State legislatures, and other State and regional agencies need much information from and about the schools. Research workers at all levels--public schools, colleges and universities, various State and Federal agencies, and professional organizations--need information essential to the study of basic educational problems.

The schools and the various agencies collect data of many types and in many ways, but there is serious inefficiency and lack of coordination, considerable overlap and duplication, and frequent repetition of tasks required of persons supplying the information. Teachers and administrators, filling out numerous questionnaires and report forms for different agencies and for different purposes, find they are supplying exactly the same detailed items of information over and over again, from agency to agency, and from year to year.

For this reason Iowa school personnel have good reason to be concerned about the growing burden being placed upon them by the data-collecting activities of the various educational agencies.

This burden certainly does not bring about any improvement in the willingness of school people to comply with all requests for information. As a result a small percentage of replies and a disturbing incidence of error characterizes many of the data-collecting activities, thereby often defeating the basic purposes of data collection.

Inadequate Feedback

One of the reasons for the increasingly negative attitude of school personnel to requests for information is that adequate provision for feedback to the persons or schools supplying the information frequently has not been made. School personnel contribute heavily of their time and effort to these agencies, but the flow of information has been largely a one-way street. Many of the findings are surely of interest and value to the schools and individuals who supplied the original data and clearly they deserve to share in the results.

The local schools likewise are concerned with their own internal data-collecting and data-recording activities. Many schools have systems of pupil, course, personnel, facilities, and financial accounting with which they are not completely satisfied. In many instances the records kept locally are incomplete, or inadequate, and in even more instances the data that have been collected are not used to full advantage.

During the past few years, particularly, the schools have noted the amazing progress made in the development of high-speed automatic data-processing equipment, especially electronic computers, and have recognized that these machines must have great potential for public education, as well as for science, business, and industry. Many of the more progressive school systems have made determined efforts to try to utilize modern technology in their own data-collecting, recording, processing, and reporting activities. In general they have found that the problems of equipping and staffing a local data-processing center, and developing the necessary systems, computer programs, forms, and procedures, are very complex, confusing, and frustrating. Furthermore because of the rapid changes taking place in this field, the equipment installed or systems developed often seem obsolete almost before they can be put into operation. Only the largest school systems have thus far been able to make any use of electronic equipment, and even they find that many of the things they would like to do are beyond their capabilities.

Although it is impossible for the schools and agencies to be too well informed about the many facets of their operations, it is possible to collect and have available more detailed information than can be assimilated or interpreted and used effectively. The needs of school administrators for better methods of data collection and for more information are surpassed only by their need for help in organizing, integrating, interpreting, and using the information that is being and may be collected.

Need for Improved Research Facilities

Closely related is the need for improved research facilities in education and for more effective utilization in research of the great masses of data that are being and can be collected by the schools and other educational agencies. Large-scale electronic computers and improved mathematical and statistical techniques for data anlaysis are now available, but it has been impossible to utilize these facilities to full advantage because the data have not been brought together and stored in a central location in a form accessible to electronic processing.

One of the most needed of all types of educational and psychological research is that designed to determine the antecedents, the earliest observable symptoms, and the basic causes of certain problems or types of human behavior which are usually not easily recognized and identified until relatively late in the life of the individual. The school dropout, the juvenile delinquent, the under-achiever, the educationally and vocationally disoriented or non-oriented pupil, the leader, the specially talented individual, the creative individual--all evidence types of behavior that have their roots in the earlier experiences, environment, and inheritances of the individual. These should be recognized, precluded, or strengthened as early as possible.

Heretofore longitudinal research studies into these problems have necessarily been of the backward-looking type in which the needed historical data about the individual have been collected only after he has clearly manifested the critical behavior.

Research efforts of these types have typically met with very serious obstacles: (1) The difficulty of tracing back into the recorded history of the same individual and of collating different parts of the record. This is due to the lack of any universal pupil identification number system and to changes and variations in name, changes of residence, and transfers from level to level, school to school, community to community, and from school to life outside the school. (2) Lack of continuity in the records and the fact that much of the information most needed was never recorded at all. (3) The very large samples that must be drawn initially because of the attrition resulting from the aforementioned factors. And (4) the great costs in time, effort, and money required to collect and analyze the great mass of data that must be assembled.

Ongoing System Necessary

There is no satisfactory substitute for a permanent system of comprehensive and continuous accounting for a complete school population. The results of many longitudinal studies based on samples only cannot be put to immediate practical use and cannot be adequately evaluated through field trials because the data revealed as predictive for the sample are not being collected on an ongoing basis for any present population. Also, there is little immediate practical value for a particular school to know the early symptoms of dropout if observations of those symptoms have not been made, and are not being made, on all of its present pupils; neither is there any immediate opportunity to experiment with or to evaluate preventive measures that may be taken.

Sampling studies suffer from additional limitations. Most of the major costs--planning, design and printing of forms, computer programming, etc.--would be the same for even a small sample as for the complete school population of Iowa. A nationwide sampling might seem superior to a population study limited to one State, but a nationwide sampling comparable in quality, comprehensiveness, and intensiveness of data collection would be extremely difficult to achieve, particularly since it would require the complete commitment and exercise of the legal authority of 50 State departments of public instruction instead of only one.

There are many other types of research which have recently been made more feasible as a result of computerized and automated data processing techniques but which are still being bypassed because of inadequate studies in which complex and involved statistical techniques, such as factor analysis, multiple regression analysis, and multiple discriminant function analysis, must be applied to large numbers of variables for large samples of individuals or units. They also include educational studies in which the individual administrative unit (the section, the school, the school system, the community, etc.) is the basic unit of sampling, in which large and representative samples must be taken from population of such units, and in which very extensive data concerning individual pupils, teachers, etc., within each of these units also are needed, thus requiring the handling and analysis of extremely large and unwieldy masses of data.

Statewide Test Scores Available

A particularly important type of information about the educational development of the pupil consists of scores on standardized tests. For purposes of wide-scale research of the types suggested, it is especially desirable to have highly comparable measures of the educational development of all pupils in the population studied. This advantage is assured to the herein described Information System by the Iowa Testing Programs conducted by the College of Education of The University of Iowa. The programs consist of comprehensive (5-to-7 hours) achievement test batteries of high quality (the Iowa Tests of Basic Skills and the Iowa Tests of Educational Development) annually administered under closely controlled conditions to practically the entire school population of the State in grades 3-12. No other State testing program is as extensive or comprehensive as the Iowa program. The tests are centrally scored by Measurement Research Center in Iowa City and the scores permanently recorded on magnetic tape, making them accessible for integration into the information system described in this report.

Research Potential

The research potential of data collected under the Educational Information Project has both local and national implications. The information in the Iowa Educational Information Center (IEIC) files is being made as freely available as possible to qualified research workers everywhere, at all times protecting the individual identity of pupils and personnel in the files. Magnetic tape or punched-card transcriptions of selected portions of the files are provided at or near cost to responsible, qualified research agents upon request.

The data collected on a forward-looking basis will be processed by the still more advanced computers and techniques of the 1970's. National authorities are being enlisted in the effort to estimate what specific information about pupils, teachers, and schools will be needed in the longitudinal research studies of the next two decades.

There exists, then, a very real and urgent need for more efficient data-collection procedures, for better ways of analyzing and interpreting data, and for reporting "digested" information back to the schools, for means of making the data collected centrally available for research, and for more effective utilization in research of the masses of data that can now be collected. The Iowa Educational Information Center has taken significant steps to meet these needs in Iowa and to serve as an operation other States may look to in providing similar services to local schools.

II

OBJECTIVES

Objectives of the Educational Information Project as presented in the project proposal wer the following:

A. The development of instruments and procedures for collecting information about all aspects of the educational program for the total population of elementary schools, including information about individual pupils, school personnel, school buildings, and school districts.

B. The development of a bank of educational information through data-processing techniques and systems. This bank will transcribe, integrate, and store information centrally for purposes of research, evaluation and service at the national, State, and local levels.

C. The development of computer programs and data processing systems for selecting, reducing, organizing, and disseminating the educational information needed by schools and other educational agencies to perform their basic functions more effectively. This includes retrieval of data in forms necessary to provide baseline statistics for program evaluation.

D. The implementation of the second administration of the Secondary CardPac System described in detail under a proposal submitted April 7, 1964, to the U. S. Office of Education and designated Cooperative Research Project No. E-031.

Part of a Larger Project

The Educational Information Project is only a part of a considerably larger project. An understanding of this larger project is necessary for a proper evaluation of the restricted projec Therefore, this section will describe the larger project and show its relationship to this restric project.

The goal of the Iowa Educational Information Center is to provide leadership and direction to education through the application of modern data processing methods and computer technology The Center serves as a model for other states in the development of information programs to improve educational data gathering, transmission, evaluation, and research. The Center also provides training and field experience for future leaders in information science and education. The IEIC has established six major objectives in attempting to reach its goal. These are:

A. Development of Educational Data Processing Techniques for Local School Districts

Technological development has progressed at a much more rapid rate than the development of methods of applying this equipment to educational needs. Many of the needed methods will be very costly to develop and test. Specific areas in which further development is needed and work will be done include unit cost analyses, property accounting, bus route scheduling, building utilization studies, enrollment predictions, master schedule building, and ability grouping analyses.

B. Development of Centralized Educational Data Processing Techniques

This objective concerns educational data processing on a regional scale. These agencies will furnish services to the school districts which have little or no equipment of their own. These agencies will also be needed to furnish services to all districts which demand larger or more powerful equipment than is available locally. The methods developed through this project will be field tested through actual services to schools.

C. Large-Scale Collection of Educational Information

The third objective involves setting up and maintaining a comprehensive system for the continuous, systematic, and routine collection of information about all phases of the educational program--about the pupil, teacher, supervisor, counselor, administrator, custodian, school board member, parent--about the school, its organization, curriculum, the library, administrative practices, programs of special services, physical plant, etc.

D. The Development of a Centralized Information File

The fourth objective is concerned with the transcription of the information collected from the original documents to magnetic tape, and the merging, integrating, organizing, and storing of this information in form for most convenient access to large-scale computers. This central file will contain nearly all educational information now being collected for schools and agencies for any present purpose, plus much additional information collected for many purposes not hitherto served. From this file will be drawn the information needed by schools and educational agencies to perform their many functions most intelligently. From it will be drawn, also, the information needed for the great variety of research and evaluation studies demanded in the authorization of federal and state funds.

E. Facilitation of Education Research

Perhaps the most far-reaching objective of the IEIC concerns the research and evaluation studies made possible by information integrated into a central file (Example: Title I evaluation studies).

1. Facilitation of Longitudinal Research. One of the most needed types of educational and psychological research is that designed to determine the antecedents, the earliest observable symptoms, and the basic causes of certain problems or types of human behavior which are usually not easily recognized and identified until relatively late in the life of the individual.

2. Facilitation of Special Types of Large-Scale Research. Included are studies in which complex and involved statistical techniques, such as factor analysis, multiple regression analysis, and multiple discriminant function analysis must be applied to very large numbers of variables for very large samples of individuals or units.

3. General Availability and Dissemination of Research Data. The research potential of the IEIC is to be viewed primarily as of national significance. Magnetic tape or punched card transcriptions of selected portions of the files will be provided to responsible, qualified research agencies upon request. Permanent committees of expert consultants in various research areas are planned to provide advice concerning:

   a. The data to be collected and added to the files each year, and

   b. The best means of encouraging and assisting research workers to make use of the data bank.

F. Provision of Information Services

The final objective of the IEIC is the provision of information services to local schools and to state and federal agencies. A few of the specific services which will routinely be provided to the schools and educational agencies are briefly described:

1. The agency staff represents a facility for research and development of new and improved information techniques and service to the schools that may be adopted or adapted by other state and national agencies.

2. The plan provides for the immediate field trial and evaluation of these services on a very wide scale.

3. The information agency, in conjunction with the College of Education of The University of Iowa, offers excellent opportunities for the training of graduate students who may later develop and administer similar services elsewhere.

III

FLOWCHART OF STATEWIDE INFORMATION SYSTEM

The CardPac System of Educational Accounting is a statewide computerized system of collecting, integrating, summarizing and distributing educational information pertaining to secondary schools in Iowa.

This flowchart documents the method used in administering the system for the 1966-67 school year. It highlights the manual operations performed by the schools and generalizes the mechanized data processes. Each step shown on the flowchart is identified and accompanied by a brief explanation which appears on the facing page.

General plans for the 1966-67 procedure were presented by staff members from the Iowa Educational Information Center at State Department of Public Instruction area meetings, which were held in August for superintendents and secondary principals.

The 1966-67 procedure involves four computer-processed phases at the Iowa Educational Information Center which are separated by phases of data preparation at the individual schools. The flowchart has been divided into seven major sections representing these phases. There are subsections within a phase when it includes distinctly separate procedures.

Immediately following Phases I, III, V, and VII in this section are samples of significant input and output documents appropriate to the respective phases.

FLOWCHART OF STATEWIDE INFORMATION SYSTEM

PHASE I

STEPS 1-10: IEIC PROCEDURE FOR AUGUST SHIPMENT TO SCHOOLS

1. Sorting arranges the Curriculum File from spring, 1966, CardPac in District Code, School Code, IEIC Course Number, and Local Course Number sequence. (The sort by IEIC Course Number groups the courses by subject area.)

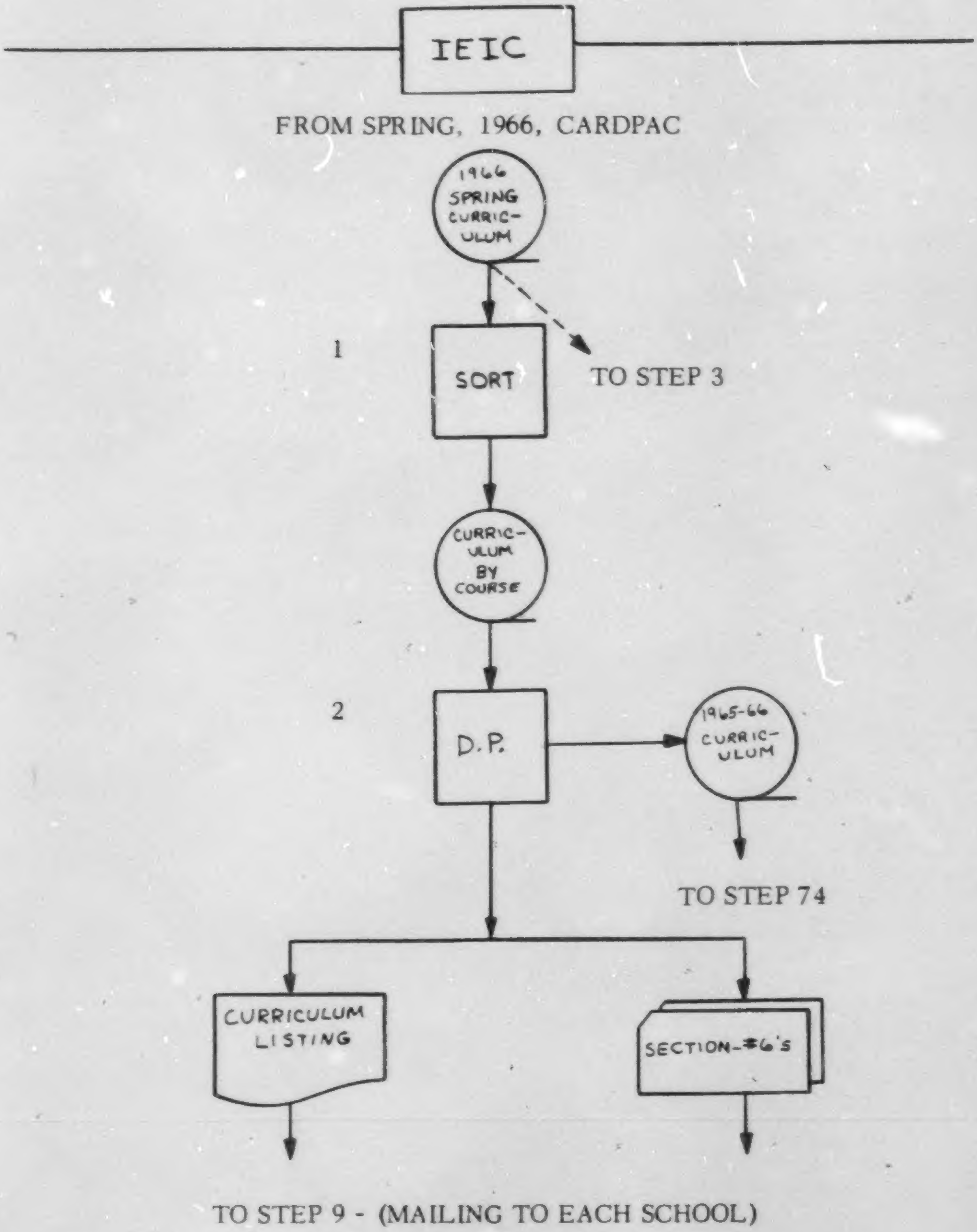
2. As the file of spring, 1966, curriculum information is processed, a new Local Course Number is computer-generated in numerical sequence for each course. Changes made by the State Department of Public Instruction in some IEIC Course Numbers and IEIC Course Titles are incorporated in this operation. Each course is also coded "1" to represent "Average" for Level of Difficulty and coded "1" to represent "Regular" for Type of Pupil. Processing produces:

    a. A Curriculum Tape File for the 1965-66 school year. This file is in District Code, School Code and Local Course Number sequence. Carried forward from spring, 1966, CardPac in one record per course, this file contains District Code, School Code, IEIC Course Number, IEIC Course Title, Number of First Semester Only Sections, Number of Second Semester Only Sections, Number of All-Year Sections, Minutes Per Week, Weeks per Year, Credit or Non-Credit, Required or Elective, Vocational or Non-Vocational, Unit Value, and Local Course Title (when used). The newly assigned Local Course Number, "Average" Level of Difficulty, and "Regular" Type of Pupils are also entered into each course record.

    b. Curriculum Listing. This list, in "two-copy" form, containing one line of information for each course, is printed in the new Local Course Number sequence. (When two titles are listed for one course, the one in parentheses is the Local Course Title.)

    c. CardPac Section Cards, #6. One card is produced for each section of each course shown on the Curriculum Listing. In the new Local Course Number sequence, the cards are preidentified with District Code, School Code, IEIC (Course) Number, Local Course Number and either IEIC or Local Course Title. (When the curriculum file contains both titles, the Local Course Title is printed on the card.)

(PREPARING CURRICULUM MATERIALS FOR SCHOOLS)


IEIC
FROM SPRING, 1966, CARDPAC
1966 SPRING CURRIC-ULUM
1
SORT
TO STEP 3
CURRIC-ULUM BY COURSE
2
D.P.
1965-66 CURRIC-ULUM
TO STEP 74
CURRICULUM LISTING
SECTION-#6's
TO STEP 9 - (MAILING TO EACH SCHOOL)

3. Sorting arranges the Curriculum File from spring, 1966, CardPac in District Code, School Code, and Teacher Code sequence.

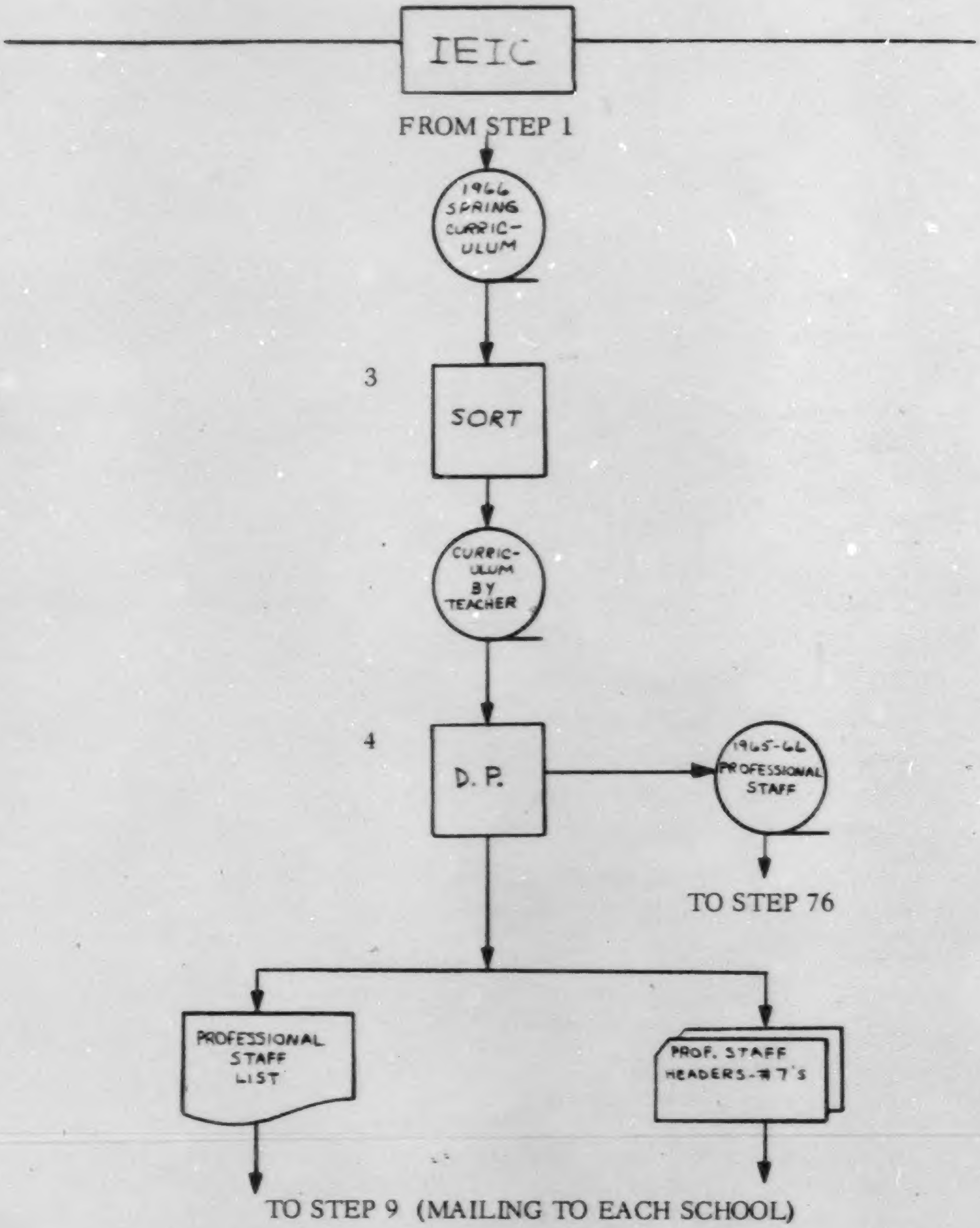
4. As the file of spring, 1966, curriculum information is processed for teacher data, a new three-digit Staff Code is computer-generated in numerical sequence for each teacher. Processing produces:

    a. A Professional Staff Tape File for the 1965-66 school year. This file is in District Code, School Code, and Staff Code sequence. Carried forward from spring CardPac in one record per teacher, this file contains District Code, School Code, Name, and Social Security Number. The newly assigned Staff Code is also entered into each staff member's record.

    b. Professional Staff List. This list, containing one line of information for each teacher, is printed in Staff Code sequence.

    c. Professional Staff Header Cards, #7. One card is produced for each teacher shown on the Professional Staff List. In Staff Code sequence, the cards are preidentified with District Code, School Code, Staff Code, and Name.

(PREPARING STAFF MATERIALS FOR SCHOOLS)


IEIC
FROM STEP 1
1966 SPRING CURRIC-ULUM
3
SORT
CURRIC-ULUM BY TEACHER
4
D. P.
1965-66 PROFESSIONAL STAFF
TO STEP 76
PROFESSIONAL STAFF LIST
PROF. STAFF HEADERS-#7's
TO STEP 9 (MAILING TO EACH SCHOOL)

5. As the file of spring, 1966, pupil information is processed, including handling exceptions to the CardPac System, a Pupil Tape File for the 1965-66 school year is produced. Carried forward from spring, 1966, CardPac in one record per pupil, this file contains 1966-67 District Code and School Code, 1965-66 School Code, the last five digits of Pupil Number, Pupil Name, Birthdate, Sex, Father's Occupation, Mother's Occupation, pupil status at the close of the 1965-66 school year (enrolled or not enrolled), 1965-66 Entry and Withdrawal Codes, Educational Classification at the close of the 1965-66 school year, "65-66" Year of File, Grade Points to Date (sum of the products of Grade Values multiplied by Course Credit Unit Values), and Credits Earned to Date (sum of Course Credit Unit Values earned). The grade level entered in the new file record for each pupil is one year higher than the grade appearing in the spring file. A code "1" to represent "Regular Education--Resident" for Educational Classification is also entered into each pupil record.

6. The file is sorted to District Code, School Code, Grade and Name sequence.

7. Processing produces:

   a. Assigned Pupil Stencil Card List. This list contains one line of information for each pupil who, according to CardPac records, can be anticipated as a current year enrollee. The information is printed in sequence alphabetically by name within grade.

      High school lists include pupils who were enrolled in the school at the close of the spring term and anticipated transfers, as identified last spring by junior high schools. Last year's twelfth grade pupil information is listed in the last section titled Graduate Follow-up Pupils. Junior high school lists include pupils enrolled in the school at the close of the spring term who, according to the reported grade level, can be expected to return this year.

   b. Pupil Stencil Card, #1 (Assigned). One card is produced for each pupil shown on the Assigned Pupil Stencil Card List. In sequence alphabetically by name within grade, the cards are preidentified with Pupil Number, District Code, School Code, Pupil Name, Birthdate, Grade, Sex, Father's Occupation (Code), Mother's Occupation (Code), and Educational Classification "1" (Regular Education--Resident).

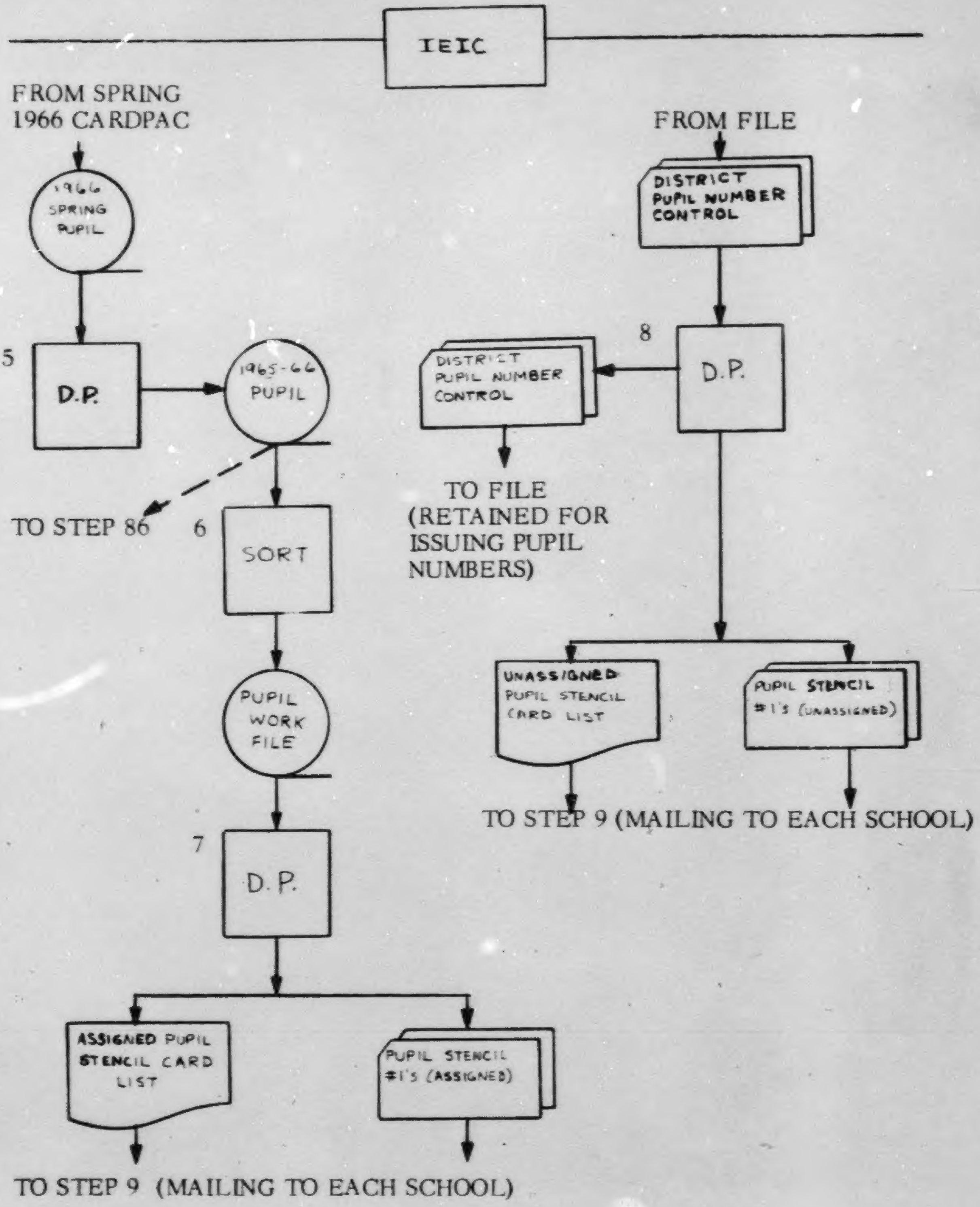
8. By processing District Pupil Control Cards, additional pupil numbers are issued by district. The control cards contain the highest number previously issued to the district and the quantity of numbers to be issued. One card is produced for each new pupil number. After the cards for each district are separated into groups for the district's schools, they are used to print lists of these numbers. For each school this step produces:

   a. Unassigned Pupil Stencil Card List. This list of unassigned pupil numbers for "assignment" to new pupils throughout the school year is printed in numerical sequence.

   b. Unassigned Pupil Stencil Cards, #1. There is one card for each number shown on the Unassigned Pupil Stencil Card List. In sequence by Pupil Number, the cards are preidentified with District Code and Pupil Number.

   (New District Pupil Number Control Cards, containing the highest pupil number issued to the district in this operation, are also produced. These cards are filed for future use.)

(PREPARING PUPIL MATERIALS FOR SCHOOLS)


IEIC
FROM SPRING 1966 CARDPAC
1966 SPRING PUPIL
5
D.P.
1965-66 PUPIL
TO STEP 86
6
SORT
PUPIL WORK FILE
7
D.P.
ASSIGNED PUPIL STENCIL CARD LIST
PUPIL STENCIL #1'S (ASSIGNED)
TO STEP 9 (MAILING TO EACH SCHOOL)
FROM FILE
DISTRICT PUPIL NUMBER CONTROL
8
D.P.
DISTRICT PUPIL NUMBER CONTROL
TO FILE (RETAINED FOR ISSUING PUPIL NUMBERS)
UNASSIGNED PUPIL STENCIL CARD LIST
PUPIL STENCIL #1'S (UNASSIGNED)
TO STEP 9 (MAILING TO EACH SCHOOL)

9. Items sent to each school August 30th include:

Preidentified cards and matching lists:

- a. Section Cards #6 and Curriculum Listing
- b. Professional Staff Header Cards #7 and Professional Staff List
- c. Assigned Pupil Stencil Cards #1 and Assigned Pupil Stencil Card List
- d. Unassigned Pupil StencilCards #1 and Unassigned Pupil Stencil Card List

Blank cards from stock:

- a. School Header Cards (2 per school)
- b. Pupil Information Cards #2 (120% of pupil population, minimum of 20)
- c. Section Cards #6 with red stripe (The quantity necessary to provide a total of preidentified and blank #6 cards to equal 40% of the pupil population, minimum of 10)
- d. Professional Staff Header Cards #7 with red stripe (The quantity necessary to provide a total of preidentified and blank #7 cards to equal 7% of the pupil population, minimum of 10)
- e. Non-Teaching Assignment Cards #12 (6% of pupil population, minimum of 20)
- f. Pupil Supervision Assignment Cards #15 (25% of pupil population, minimum of 20)
- g. Blank Dividers (6 per school)

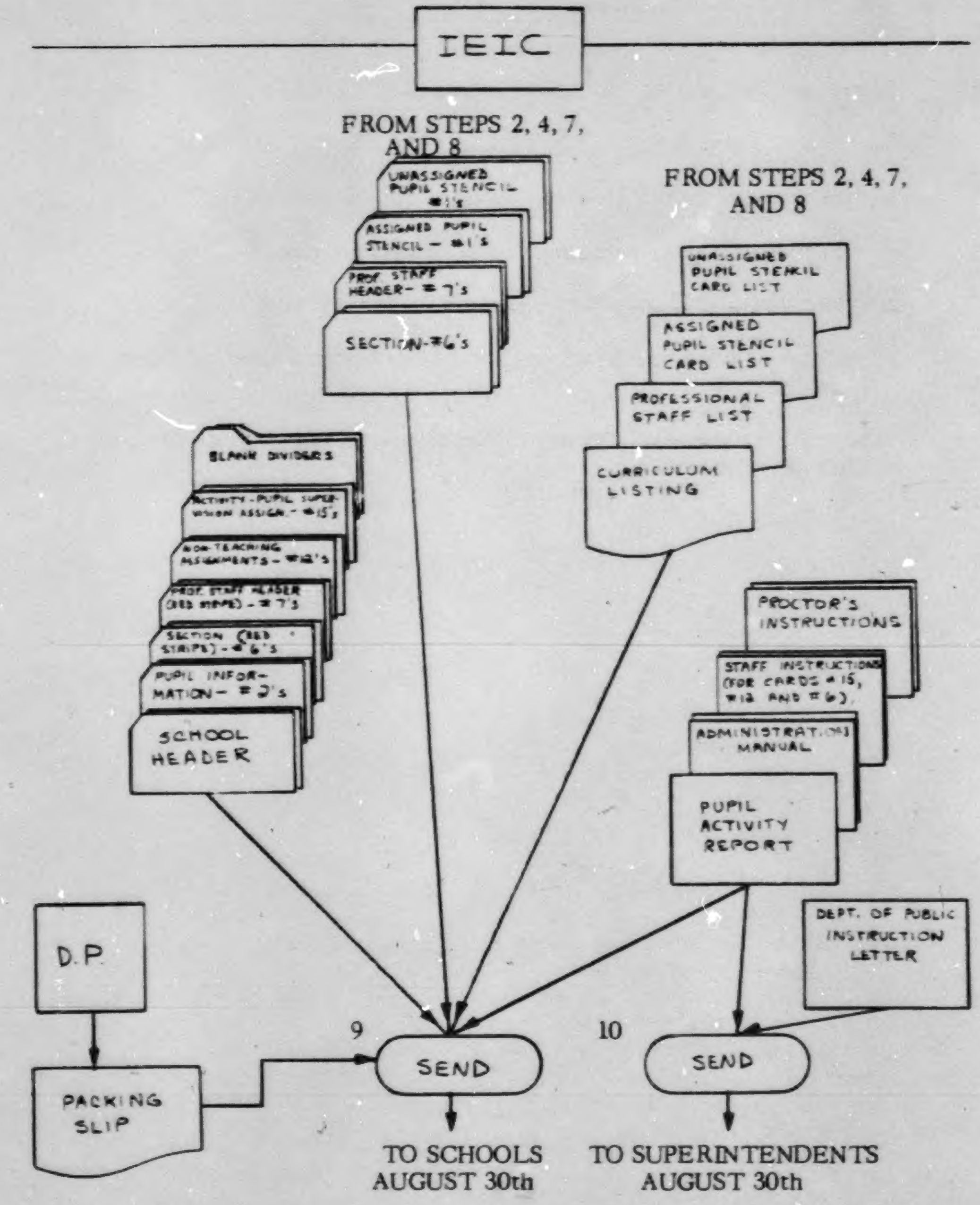
Forms and instructions:

- a. Pupil Activity Report (1 per school)
- b. Administration Manuals (2 per school)
- c. Staff Instructions (5% of pupil population, minimum of 10)
- d. Proctor's Instructions (5% of pupil population, minimum of 10)

Packing slip

10. One copy each of the Pupil Activity Report, Administration Manual, Staff Instructions and Proctor's Instructions are enclosed with a letter from the State Department of Public Instruction and sent to the district superintendents.

(FIRST SHIPMENT TO SCHOOLS)


IEIC
FROM STEPS 2, 4, 7, AND 8
UNASSIGNED PUPIL STENCIL #1's
ASSIGNED PUPIL STENCIL - #1's
PROF STAFF HEADER - #7's
SECTION-#6's
FROM STEPS 2, 4, 7, AND 8
UNASSIGNED PUPIL STENCIL CARD LIST
ASSIGNED PUPIL STENCIL CARD LIST
PROFESSIONAL STAFF LIST
CURRICULUM LISTING
BLANK DIVIDERS
ACTIVITY - PUPIL SUPERVISION ASSIGN. - #15's
NON-TEACHING ASSIGNMENTS - #12's
PROF. STAFF HEADER (RED STRIPE) - #7's
SECTION (RED STRIPE) - #6's
PUPIL INFORMATION - #2's
SCHOOL HEADER
PROCTOR'S INSTRUCTIONS
STAFF INSTRUCTIONS (FOR CARDS #15, #12 AND #6)
ADMINISTRATION MANUAL
PUPIL ACTIVITY REPORT
DEPT. OF PUBLIC INSTRUCTION LETTER
D.P.
PACKING SLIP
9
SEND
10
SEND
TO SCHOOLS AUGUST 30th
TO SUPERINTENDENTS AUGUST 30th

STEP 11: IEIC PROCEDURE FOR SEPTEMBER SHIPMENT TO DISTRICT AND COUNTY OFFICES

11. Items sent to district and county superintendents September 9 include:

    a. District and County Office Professional Staff List (blank form)

    b. Professional Staff Header Cards #7 (blank cards)

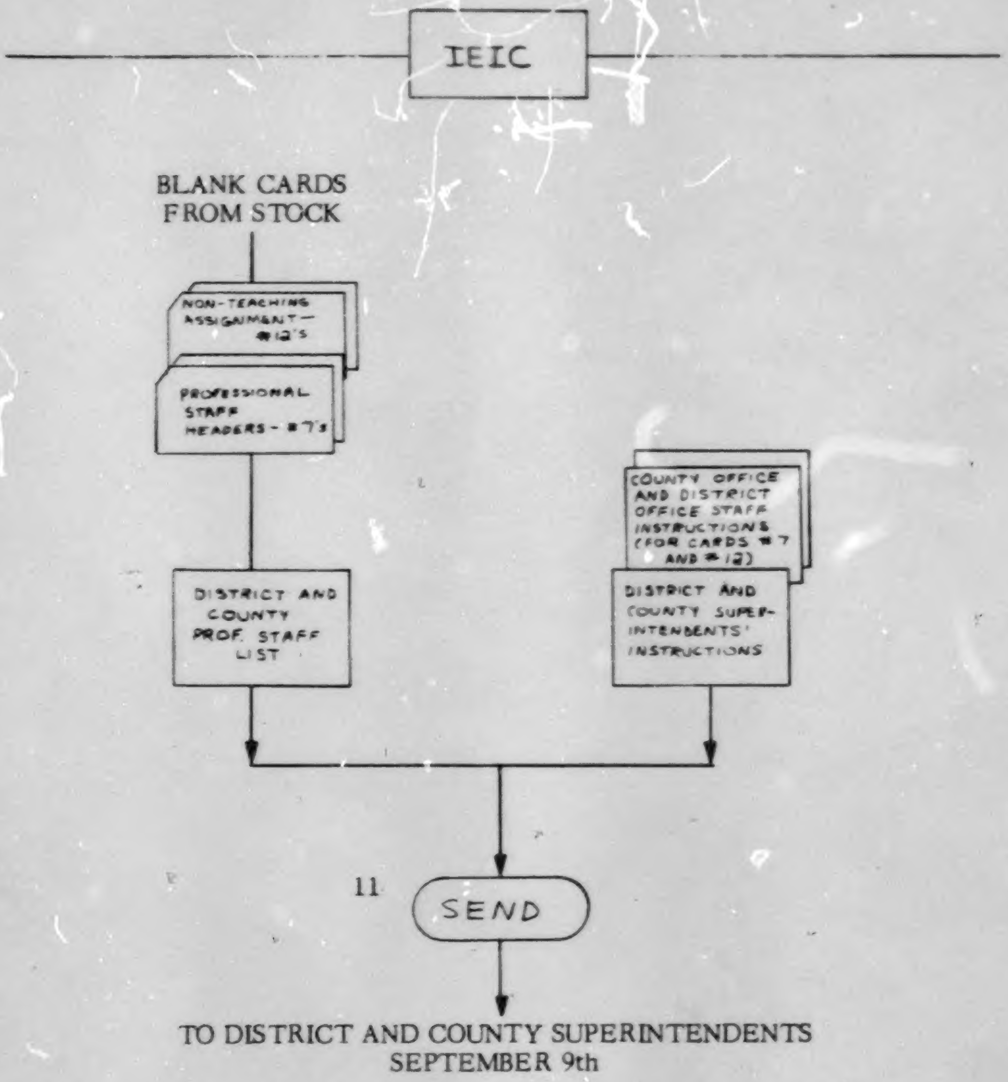
    c. Non-teaching Assignment Cards #12 (blank cards)

    d. District and County Superintendent's Instructions

    e. County Office and District Office Staff Instructions for Cards #7 and #12.

    (The State Educational Directory can be used to determine the quantity of each item needed.)

(FIRST SHIPMENT TO DISTRICT AND COUNTY OFFICES)


IEIC
BLANK CARDS FROM STOCK
NON-TEACHING ASSIGNMENT — #12's
PROFESSIONAL STAFF HEADERS - #7's
DISTRICT AND COUNTY PROF. STAFF LIST
COUNTY OFFICE AND DISTRICT OFFICE STAFF INSTRUCTIONS (FOR CARDS #7 AND #12)
DISTRICT AND COUNTY SUPER-INTENDENTS' INSTRUCTIONS
11
SEND
TO DISTRICT AND COUNTY SUPERINTENDENTS
SEPTEMBER 9th

PHASE I INPUT AND OUTPUT DOCUMENTS

1. Curriculum Listing
2. Section Card #6
3. Professional Staff List
4. Professional Staff Card #7
5. Assigned Pupil Stencil List
6. Pupil Stencil Card #1
7. Pupil Information Card #2
8. Non-Teaching Assignment Card #12
9. Pupil Supervision Assignment Card #15

FIGURE 1

CURRICULUM LISTING

SCHOOL NAME ALBURNETT DISTRICT CODE 0099 SCHOOL CODE 172 YEAR 66-67 PAGE 14

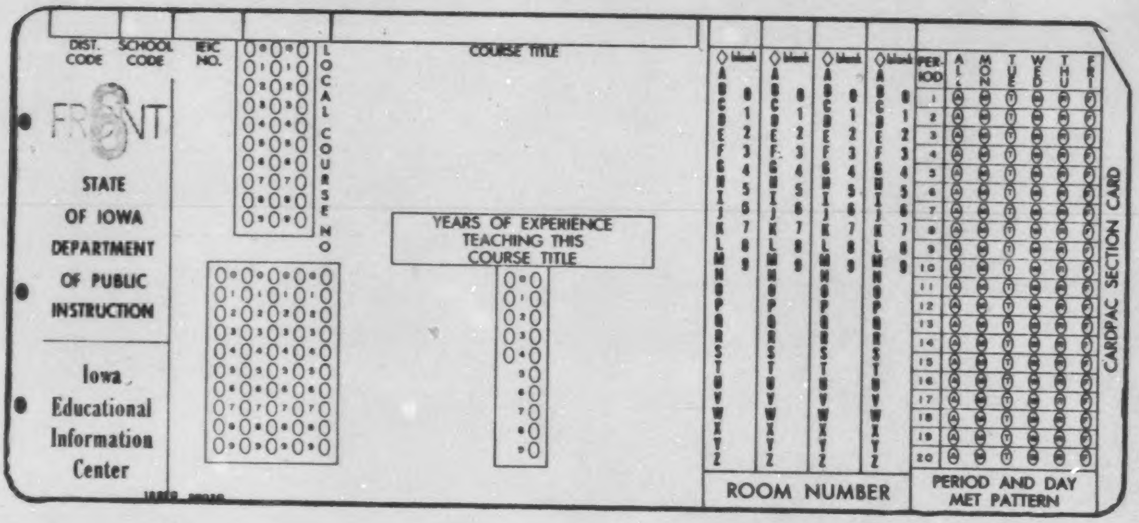
OTHER SCHOOL		IEIC COURSE CODE	IEIC COURSE TITLE	LOCAL COURSE NUMBER	NUMBER OF SECT. OFFERED			MINUTES PER WEEK	WEEKS PER YEAR	DIFFICULTY	TYPE PUPIL	CREDIT	REQUIRED	VOCATIONAL	UNIT VALUE
DIST. CODE	SCHOOL CODE				SEM 1	SEM 2	YEAR								
		1330	(ENGLISH,GR7) ENGLISH 7	101			2	0275	36	1	1	1	1	0	1.00
		1340	ENGLISH 9	103			2	0275	36	1	1	1	1	0	2.00
		1342	ENGLISH 11	105			2	0275	36	1	1	1	1	0	2.00
		1740	SPEECH I	107	1			0275	18	1	1	1	0	0	1.00
		2130	(ART+LIT) ART GR. 7	109		1		0275	18	1	1	1	1	0	0.50
		2131	(ART+LIT) ART GR. 8	111		1		0275	18	1	1	1	1	0	0.50
		2241	GLEE CLUB	113			1	0137	36	1	1	0	0	0	0.00
		3540	SPANISH I	115			1	0275	36	1	1	1	0	0	2.00
		3542	SPANISH III	117			1	0275	36	1	1	1	0	0	2.00
		4141	ALGEBRA II	119			1	0275	36	1	1	1	0	0	2.00
		4434	(MOD.MATH,GR8) MOD MATH 8	121			2	0275	36	1	1	1	1	0	1.00
		4540	(PLANE GEOM.) PLANE GEOMET	123			1	0275	36	1	1	1	0	0	2.00
		5230	(BOYS PE, GR7) BOYS' P.E. 7	125			1	0275	36	1	1	1	1	0	1.00
		5240	(BOYS PE,9-12) BOYS' P.E.	127			3	0137	36	1	1	0	1	0	0.00
		5331	(GIRLS PE,GR8) GIRLS' PE 8	129			1	0275	36	1	1	1	1	0	1.00
		6140	BIOLOGY I	131			1	0275	36	1	1	1	0	0	2.00
		6330	(SCIENCE, GR7) SCIENCE 7	133			2	0275	36	1	1	1	1	0	1.00
		6360	(GEN.SCIE. 9) GEN SCI I	135			2	0275	36	1	1	1	1	0	2.00
		7140	ECONOMICS	137		1		0275	18	1	1	1	1	0	1.00
		7342	WORLD HIST.	139			2	0275	36	1	1	1	1	0	2.00
		8150	(VO AG I+II) VOC. AG. I	141			1	0275	36	1	1	1	0	1	2.00
		8231	(HMKG.GRD 8) HMKG EXPL 8	143		1		0275	18	1	1	1	1	0	0.50
		8250	(VOC.HMKG. I) HMKG I-COMP	145			1	0275	36	1	1	1	0	1	2.00
		8401	(BKKPG. I) BKKPG I	147			1	0275	36	1	1	1	0	0	2.00
		8441	TYPING II	149			1	0275	36	1	1	1	0	0	2.00
		8490	(OFFICE PRAC-) OFFICE PRAC	151			1	0275	36	1	1	1	0	0	2.00

OTHER SCHOOL		IEIC COURSE CODE	IEIC COURSE TITLE	LOCAL COURSE NUMBER	NUMBER OF SECT. OFFERED			MINUTES PER WEEK	WEEKS PER YEAR	DIFFICULTY	TYPE PUPIL	CREDIT	REQUIRED	VOCATIONAL	UNIT VALUE
DIST. CODE	SCHOOL CODE				SEM 1	SEM 2	YEAR								
		1331	(ENGLISH,GR8) ENGLISH 8	102			2	0275	36	1	1	1	1	0	1.00
		1341	ENGLISH 10	104			2	0275	36	1	1	1	1	0	2.00
		1343	ENGLISH 12	106			1	0275	36	1	1	1	0	0	2.00
		2130	(ART+LIT) ART GR. 7	108	1			0275	18	1	1	1	1	0	0.50
		2131	(ART+LIT) ART GR. 8	110		1		0275	18	1	1	1	1	0	0.50
		2240	MIXED CHORUS	112			1	0137	36	1	1	0	0	0	0.00
		2242	(SENIOR BAND) BAND	114			1	0137	36	1	1	0	0	0	0.00
		3541	SPANISH II	116			1	0275	36	1	1	1	0	0	2.00
		4140	ALGEBRA I	118			2	0275	36	1	1	1	0	0	2.00
		4433	(MOD.MATH,GR7) MOD MATH 7	120			2	0275	36	1	1	1	1	0	1.00
		4440	(GEN.MATH I) GEN'L MATH I	122			1	0275	36	1	1	1	0	0	2.00
		4740	(SR.TOP.MATH) SR TOP MATH.	124			1	0275	36	1	1	1	0	0	2.00
		5231	(BOYS PE, GR8) BOYS' P.E. 8	126			1	0275	36	1	1	1	1	0	1.00
		5330	(GIRLS PE,GR7) GIRLS' PE 7	128			1	0275	36	1	1	1	1	0	1.00
		5340	(GIRL PE,9-12) GIRLS' P.E.	130			3	0137	36	1	1	0	1	0	0.00
		6240	CHEMISTRY I	132			1	0275	36	1	1	1	0	0	2.00
		6331	(SCIENCE, GR8) SCIENCE 8	134			2	0275	36	1	1	1	1	0	1.00
		6440	PHYSICS I	136			1	0275	36	1	1	1	0	0	2.00
		7340	(AMER.HISTOR8) AMER HISTORY	138			2	0275	36	1	1	1	1	0	2.00
		7540	AMERICAN GOV	140	1			0275	18	1	1	1	1	0	1.00
		8231	(HMKG.GRD 8) HMKG EXPL 8	142		1		0275	18	1	1	1	1	0	0.50
		8242	(VO AG III+IS) GEN HMKG III	144			1	0275	36	1	1	1	0	1	2.00
		8251	(VOC.HMKG. I9) HMKG II-COMP	146			1	0275	36	1	1	1	0	1	2.00
		8440	TYPING I	148			2	0275	36	1	1	1	0	0	2.00
		8480	SHORTHAND I	150			1	0275	36	1	1	1	0	0	2.00
		8540	(IND.ARTS I) COOP IND ED.	152			1	0275	36	1	1	1	0	0	2.00

FIGURE 2

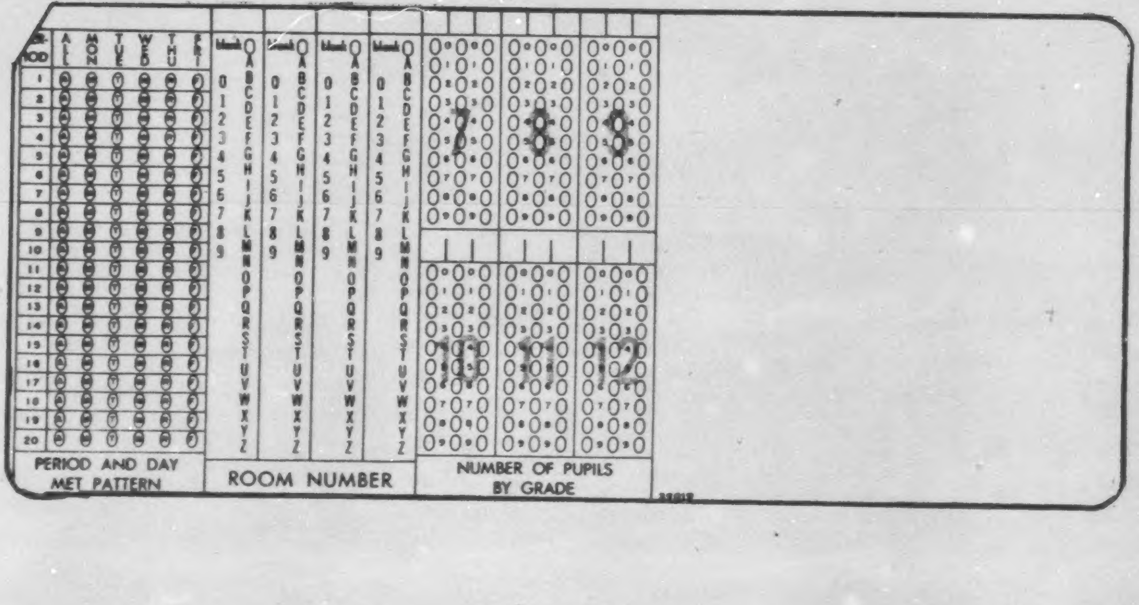
SECTION CARD #6

(Front)



DIST. CODE
SCHOOL CODE
IEIC NO.
LOCAL COURSE NO
COURSE TITLE
FRONT
6
STATE OF IOWA DEPARTMENT OF PUBLIC INSTRUCTION
Iowa Educational Information Center
YEARS OF EXPERIENCE TEACHING THIS COURSE TITLE
ROOM NUMBER
PER-IOD
ALL
MON
TUE
WED
THU
FRI
PERIOD AND DAY MET PATTERN
CARDPAC SECTION CARD

(Back)



PER-IOD
ALL
MON
TUE
WED
THU
FRI
PERIOD AND DAY MET PATTERN
ROOM NUMBER
7
8
9
10
11
12
NUMBER OF PUPILS BY GRADE

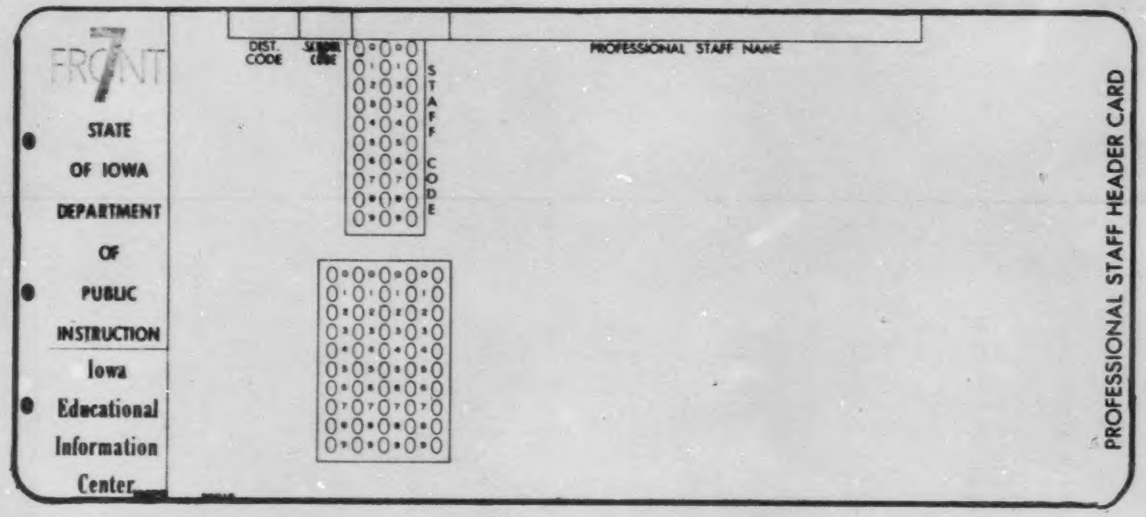
FIGURE 3

```
1966-67 PROFESSIONAL STAFF LIST FOR-IOWA CITY HIGH               ID-3141-109       FILE 914        DATE- 5/11/67       PAGE-003

        NAME                  SOC.SEC     CODE           NAME                   SOC.SEC     CODE           NAME                  SOC.SEC     CODE

    ARCHER                  484-28-9894   001      ASBY                       485-46-2257   002      BAKER                     500-14-5713   003
    BAKER                   482-52-9751   004      BATES FRANK                   -  -       005      BEAN                      483-26-6858   006
    BIANCO                  552-52-5081   007      BOWMAN                     507-01-0369   009      CAMPBELL                  469-24-2995   010
    CARVER                  480-54-5882   011      CHAMBERS                   479-36-5694   012      CHITTENDEN                478-50-5474   013
    CONNER                  456-22-9591   014      CONWAY                     479-46-9780   015      DAVIS                     481-48-1229   016

    DEAN                    479-24-3744   017      DUNCAN                     499-16-4080   018      EBERLY                    479-44-7621   019
    EBNER                   485-34-3883   020      FETT                       479-26-4242   021      FLESNER                   478-30-6992   022
    FORWALD                 579-20-7785   023      FREDERICK                  204-16-6573   024      GARCIA                    527-40-7061   025
    GILMORE                 481-48-3233   026      GORE                       485-12-8019   027      GRASSO                    485-22-8759   028
    GREENWALD               484-32-0807   029      HAESEMEYER                 478-30-69[illegible]   030      HICKMAN                   485-16-0250   031

    HOOTMAN                 480-18-7133   032      JABLONSKI                  328-09-7794   033      JEFFERY                   456-68-7452   034
    JENKINS                 481-32-0018   035      KIRKMAN                    480-22-7044   036      LANAGHAN                  478-46-8031   037
    LENTZ                   360-34-0526   038      LOGAN                      482-34-1837   039      MANKENBERG                483-40-8674   041
    MAUSETH                 369-12-6111   042      COLYER                     388-34-9332   043      MOORE                     484-07-2093   044
    MUELLER SALLY           480-50-5254   045      MULLEN                     175-22-5744   046      MURPHY                    479-50-6175   047

    RAJPAL                  480-58-8760   048      REID                       481-18-7081   049      REW                       483-12-1692   050
    RICE                    318-32-4844   051      ROBERTSON                  332-16-7627   052      ROBICHAUD                 034-12-6910   053
    SANDELL                 478-38-4971   054      SAXTON                     483-38-1544   055      SCHNACK                   481-52-5028   056
    SKOG                    479-34-7949   057      STOOKEY                    484-54-2915   058      TURK                      554-70-5326   059
    TURNER                  478-48-1978   060      VAN HORNE                  493-16-8309   061      WHITE ROBERT                 -  -       062

    WYANT                   482-46-8057   063      NEWQUIST DAWN              350-30-8036   064      TAYLOR RICHARD            478-16-3722   065
    ASCHENBRENNER RALPH     484-20-7041   066      WINBIGLER ELIZABETH        478-30-5802   067      CARTHEY FRANK             478-28-2224   068
    KING ROBERT             500-28-3736   069      PLUMER DEAN                482-30-6874   070      ROMINE ROBERT             481-26-2418   071
    TREKELL CHARLENE        465-58-3260   072      RILEY CAROLYN              503-50-5935   073

       BUILDING TOTALS
         TEACHER NCNT-00071          RECORDS ON 915 UNMATCHED-00003     RECORDS ON 913 UNMATCHED-
```

FIGURE 4

PROFESSIONAL STAFF CARD #7

(Front)



FRONT 7

STATE
OF IOWA
DEPARTMENT
OF
PUBLIC
INSTRUCTION

Iowa
Educational
Information
Center

DIST. CODE

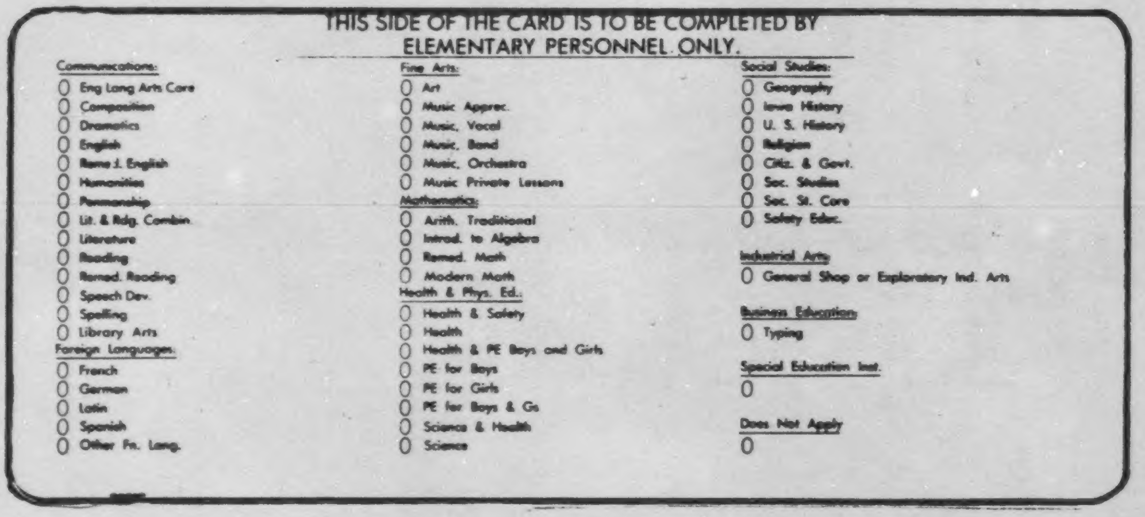
SCHOOL CODE

STAFF CODE

PROFESSIONAL STAFF NAME

PROFESSIONAL STAFF HEADER CARD

(Back)



THIS SIDE OF THE CARD IS TO BE COMPLETED BY
ELEMENTARY PERSONNEL ONLY.

Communications:
- ○ Eng Lang Arts Core
- ○ Composition
- ○ Dramatics
- ○ English
- ○ Remed. English
- ○ Humanities
- ○ Penmanship
- ○ Lit. & Rdg. Combin.
- ○ Literature
- ○ Reading
- ○ Remed. Reading
- ○ Speech Dev.
- ○ Spelling
- ○ Library Arts

Foreign Languages:
- ○ French
- ○ German
- ○ Latin
- ○ Spanish
- ○ Other Fn. Lang.

Fine Arts:
- ○ Art
- ○ Music Apprec.
- ○ Music, Vocal
- ○ Music, Band
- ○ Music, Orchestra
- ○ Music Private Lessons

Mathematics:
- ○ Arith. Traditional
- ○ Introd. to Algebra
- ○ Remed. Math
- ○ Modern Math

Health & Phys. Ed.:
- ○ Health & Safety
- ○ Health
- ○ Health & PE Boys and Girls
- ○ PE for Boys
- ○ PE for Girls
- ○ PE for Boys & Gs
- ○ Science & Health
- ○ Science

Social Studies:
- ○ Geography
- ○ Iowa History
- ○ U. S. History
- ○ Religion
- ○ Citiz. & Govt.
- ○ Soc. Studies
- ○ Soc. St. Core
- ○ Safety Educ.

Industrial Arts:
- ○ General Shop or Exploratory Ind. Arts

Business Education:
- ○ Typing

Special Education Inst.
- ○

Does Not Apply
- ○

FIGURE 5

1966-67 ASSIGNED PUPIL STENCIL LIST

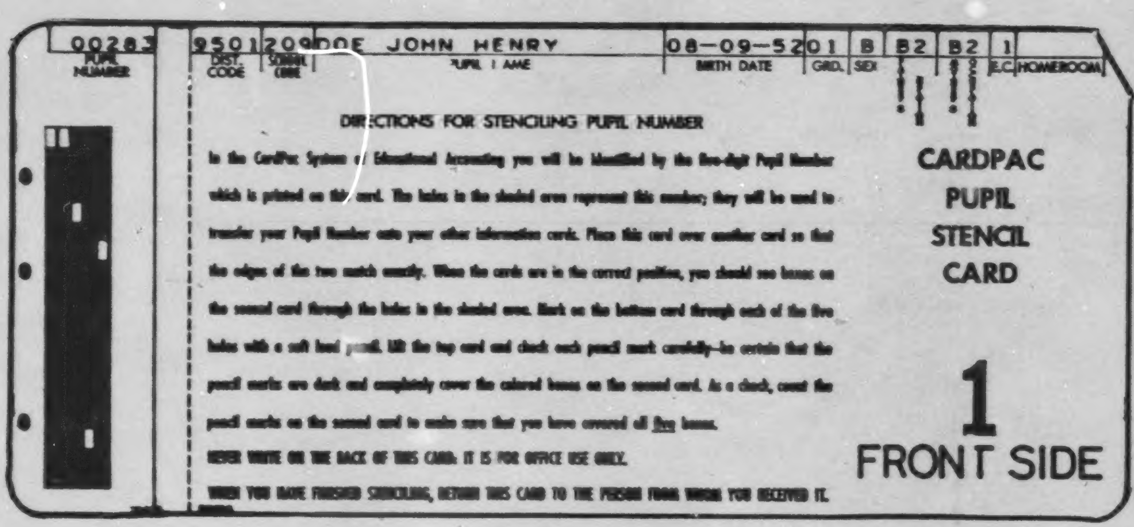
GUTTENBERG COMMUNITY SCHO DISTRICT CODE--2763 SCHOOL CODE--172

PUPIL NAME	NUMBER	GRADE	SEX	BIRTHDATF	E.C.
ALTHOFF JEAN MARIE	00332	08	G	5-26-53	1
BEHREND MARTIN	00329	08	B	3-23-53	1
BOARDMAN JOLENE A	00376	08	G	7-18-53	1
BOLSINGER BARBARA A	00380	08	G	7-31-53	1
BOLSINGER N RMA J	00381	08	G	4-06-52	1
BORCHERDING JANET J	00388	08	G	11-06-53	1
CONLEY JO H C	00387	08	B	10-02-52	1
DAVIDSHOFER MAE L	00375	08	G	11-26-54	1
DEAN LEONARD A	00310	08	B	9-25-42	1
DES TEL RAND D	00331	08	B	12-20-52	1
DETTMAN JULIE A	00379	08	G	8-01-53	1
FINNEGAN MICHAEL W	00389	08	B	7-04-52	1
FREDLAKE DARREL D	00384	08	B	9-11-53	1
FREEMAN GLENN F	00308	08	B	3-12-53	1
GEICK BONNIE SUE	00374	08	G	11-08-43	1
GEICK NANCY JOU	00372	08	G	3-13-52	1
HANKES ROXY A	00322	08	G	11-17-52	1
HEFEL JEAN ANN H	00373	08	G	11-11-53	1
HINZMAN C RAYMOND	00320	08	B	5-11-53	1
HOOK DENNIS D	00327	08	B	9-06-52	1
HYDE SUSAN M	00325	08	G	8-25-53	1
KAHLE CAROL D	00323	08	G	11-25-52	1
KRAUS KAREN K	00328	08	G	3-13-53	1
KRESS VIOLET ANN	00326	08	G	11-17-52	1
LELIEFELD LUANN E	00330	08	G	10-05-53	1
MILLER DIANNE KAY	00324	08	G	8-30-52	1
MOSER BRADLEY L	00317	08	B	10-07-53	1
MOSER LEON L	00383	08	B	8-15-52	1
MOSER LONNIE L	00314	08	B	4-02-53	1
MOSER M BECK	00386	08	G	3-10-53	1
NIEHAUS BECKY L	00334	08	G	2-28-52	1
NIEHAUS JERRY V	00382	08	B	9-29-54	1
NIEHAUS TRUDY A	00321	08	G	2-27-53	1
PATZNER MARCELLA R	00318	08	G	10-13-53	1
PETSCHE ROBERT LEE	00319	08	B	8-23-51	1
RUTLEDGE BRENA AN	00378	08	G	6-04-52	1
SADEWASSER DAVID D	00309	08	B	12-16-52	1
SHAW SUZAN E	00311	08	G	8-02-53	1
SIMON LYNDA M	00377	08	G	3-11-53	1
SOLOMON NELLIE	00316	08	G	8-05-53	1
STAADE THOMAS H	00313	08	B	4-04-52	1
STOLLENWERK JIM J	00315	08	B	5-05-53	1
TROESTER LARRY C	00306	08	B	5-12-53	1
WARD DENNIS R	00385	08	B	12-26-52	1
WITTMAN RICKY L	00307	08	B	5-21-53	1

FIGURE 6

PUPIL STENCIL CARD #1

(Front)



00283	9501	209	DOE JOHN HENRY	08-09-52	01	B	B2	B2	1	
PUPIL NUMBER	DIST. CODE	SCHOOL CODE	PUPIL NAME	BIRTH DATE	GRD.	SEX			E.C.	HOMEROOM

DIRECTIONS FOR STENCILING PUPIL NUMBER

In the CardPac System of Educational Accounting you will be identified by the five-digit Pupil Number which is printed on this card. The holes in the shaded area represent this number; they will be used to transfer your Pupil Number onto your other information cards. Place this card over another card so that the edges of the two match exactly. When the cards are in the correct position, you should see boxes on the second card through the holes in the shaded area. Mark on the bottom card through each of the five holes with a soft lead pencil. Lift the top card and check each pencil mark carefully—be certain that the pencil marks are dark and completely cover the colored boxes on the second card. As a check, count the pencil marks on the second card to make sure that you have covered all five boxes.

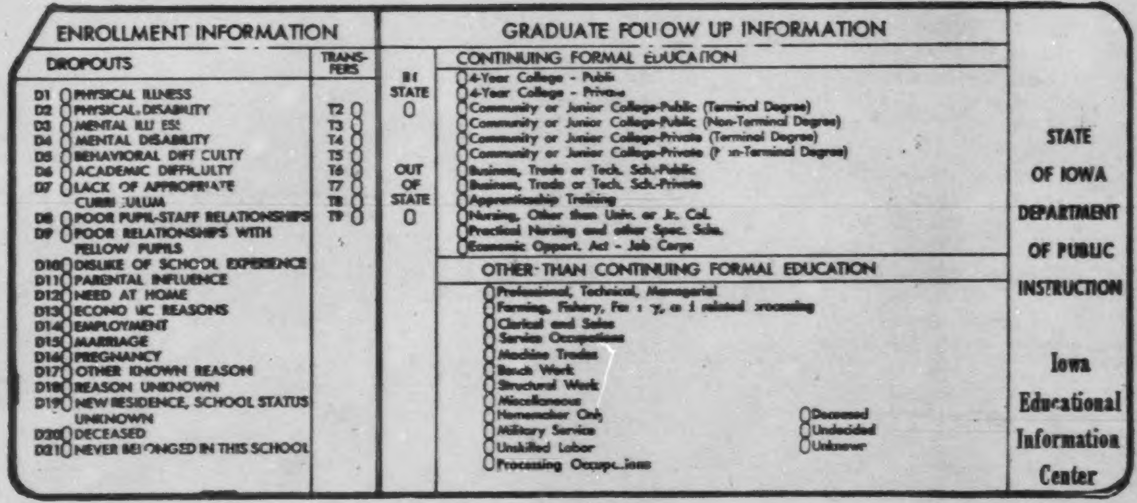
NEVER WRITE ON THE BACK OF THIS CARD: IT IS FOR OFFICE USE ONLY.

WHEN YOU HAVE FINISHED STENCILING, RETURN THIS CARD TO THE PERSON FROM WHOM YOU RECEIVED IT.

CARDPAC
PUPIL
STENCIL
CARD

1
FRONT SIDE

(Back)



ENROLLMENT INFORMATION

DROPOUTS

D1 ○ PHYSICAL ILLNESS
D2 ○ PHYSICAL DISABILITY
D3 ○ MENTAL ILLNESS
D4 ○ MENTAL DISABILITY
D5 ○ BEHAVIORAL DIFFICULTY
D6 ○ ACADEMIC DIFFICULTY
D7 ○ LACK OF APPROPRIATE CURRICULUM
D8 ○ POOR PUPIL-STAFF RELATIONSHIPS
D9 ○ POOR RELATIONSHIPS WITH FELLOW PUPILS
D10 ○ DISLIKE OF SCHOOL EXPERIENCE
D11 ○ PARENTAL INFLUENCE
D12 ○ NEED AT HOME
D13 ○ ECONOMIC REASONS
D14 ○ EMPLOYMENT
D15 ○ MARRIAGE
D16 ○ PREGNANCY
D17 ○ OTHER KNOWN REASON
D18 ○ REASON UNKNOWN
D19 ○ NEW RESIDENCE, SCHOOL STATUS UNKNOWN
D20 ○ DECEASED
D21 ○ NEVER BELONGED IN THIS SCHOOL

TRANSFERS

T2 ○
T3 ○
T4 ○
T5 ○
T6 ○
T7 ○
T8 ○
T9 ○

GRADUATE FOLLOW UP INFORMATION

IN STATE ○

OUT OF STATE ○

CONTINUING FORMAL EDUCATION

○ 4-Year College - Public
○ 4-Year College - Private
○ Community or Junior College-Public (Terminal Degree)
○ Community or Junior College-Public (Non-Terminal Degree)
○ Community or Junior College-Private (Terminal Degree)
○ Community or Junior College-Private (Non-Terminal Degree)
○ Business, Trade or Tech. Sch.-Public
○ Business, Trade or Tech. Sch.-Private
○ Apprenticeship Training
○ Nursing, Other than Univ. or Jr. Col.
○ Practical Nursing and other Spec. Schs.
○ Economic Opport. Act - Job Corps

OTHER THAN CONTINUING FORMAL EDUCATION

○ Professional, Technical, Managerial
○ Farming, Fishery, Forestry, and related processing
○ Clerical and Sales
○ Service Occupations
○ Machine Trades
○ Bench Work
○ Structural Work
○ Miscellaneous
○ Homemaker Only
○ Military Service
○ Unskilled Labor
○ Processing Occupations

○ Deceased
○ Undecided
○ Unknown

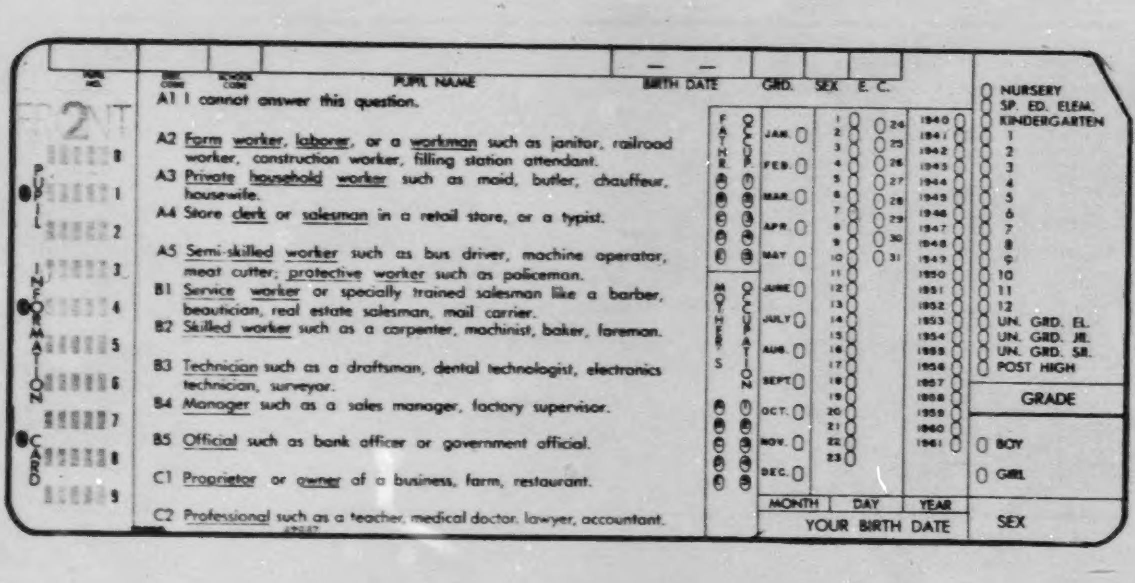
STATE OF IOWA DEPARTMENT OF PUBLIC INSTRUCTION

Iowa Educational Information Center

FIGURE 7

PUPIL INFORMATION CARD #2

(Front)



PUPIL NAME

BIRTH DATE

GRD. SEX E. C.

2

PUPIL INFORMATION CARD

A1 I cannot answer this question.

A2 Farm worker, laborer, or a workman such as janitor, railroad worker, construction worker, filling station attendant.

A3 Private household worker such as maid, butler, chauffeur, housewife.

A4 Store clerk or salesman in a retail store, or a typist.

A5 Semi-skilled worker such as bus driver, machine operator, meat cutter; protective worker such as policeman.

B1 Service worker or specially trained salesman like a barber, beautician, real estate salesman, mail carrier.

B2 Skilled worker such as a carpenter, machinist, baker, foreman.

B3 Technician such as a draftsman, dental technologist, electronics technician, surveyor.

B4 Manager such as a sales manager, factory supervisor.

B5 Official such as bank officer or government official.

C1 Proprietor or owner of a business, farm, restaurant.

C2 Professional such as a teacher, medical doctor, lawyer, accountant.

FATHER OCCUP.

MOTHER'S OCCUPATION

JAN. ○ FEB. ○ MAR. ○ APR. ○ MAY ○ JUNE ○ JULY ○ AUG. ○ SEPT ○ OCT. ○ NOV. ○ DEC. ○

1 ○ 2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7 ○ 8 ○ 9 ○ 10 ○ 11 ○ 12 ○ 13 ○ 14 ○ 15 ○ 16 ○ 17 ○ 18 ○ 19 ○ 20 ○ 21 ○ 22 ○ 23 ○ ○ 24 ○ 25 ○ 26 ○ 27 ○ 28 ○ 29 ○ 30 ○ 31

1940 ○ 1941 ○ 1942 ○ 1943 ○ 1944 ○ 1945 ○ 1946 ○ 1947 ○ 1948 ○ 1949 ○ 1950 ○ 1951 ○ 1952 ○ 1953 ○ 1954 ○ 1955 ○ 1956 ○ 1957 ○ 1958 ○ 1959 ○ 1960 ○ 1961 ○

MONTH DAY YEAR

YOUR BIRTH DATE

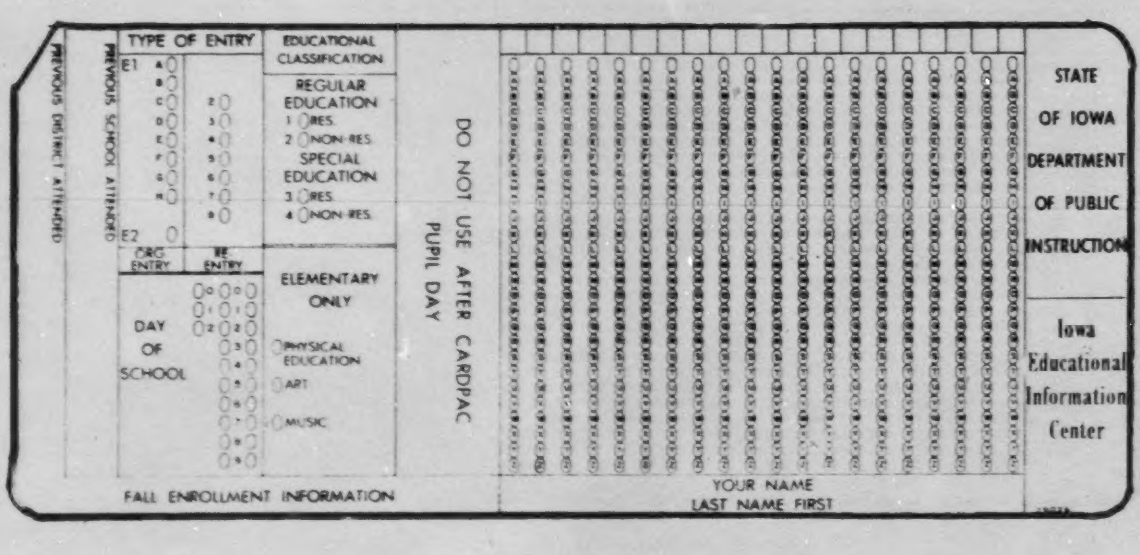
○ NURSERY
○ SP. ED. ELEM.
○ KINDERGARTEN
○ 1
○ 2
○ 3
○ 4
○ 5
○ 6
○ 7
○ 8
○ 9
○ 10
○ 11
○ 12
○ UN. GRD. EL.
○ UN. GRD. JR.
○ UN. GRD. SR.
○ POST HIGH

GRADE

○ BOY
○ GIRL

SEX

(Back)



PREVIOUS DISTRICT ATTENDED

PREVIOUS SCHOOL ATTENDED

TYPE OF ENTRY

E1 A ○ B ○ C ○ D ○ E ○ F ○ G ○ H ○

2 ○ 3 ○ 4 ○ 5 ○ 6 ○ 7 ○ 8 ○

E2 ○

ORG ENTRY RE ENTRY

DAY OF SCHOOL

EDUCATIONAL CLASSIFICATION

REGULAR EDUCATION
1 ○ RES.
2 ○ NON-RES.

SPECIAL EDUCATION
3 ○ RES.
4 ○ NON-RES.

ELEMENTARY ONLY
○ PHYSICAL EDUCATION
○ ART
○ MUSIC

FALL ENROLLMENT INFORMATION

DO NOT USE AFTER CARDPAC

PUPIL DAY

YOUR NAME
LAST NAME FIRST

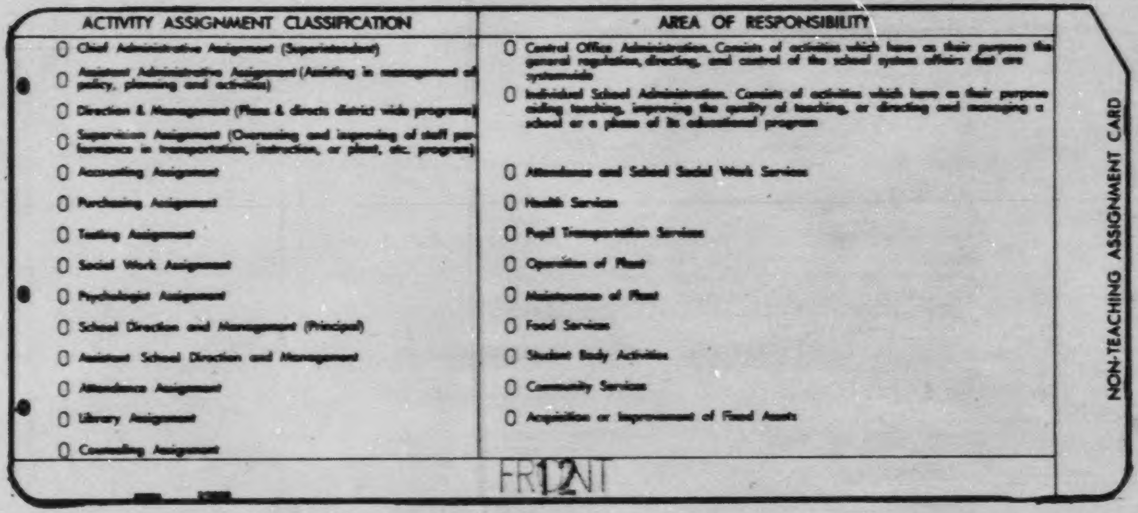
STATE OF IOWA DEPARTMENT OF PUBLIC INSTRUCTION

Iowa Educational Information Center

FIGURE 8

NON-TEACHING ASSIGNMENT CARD #12

(Front)



ACTIVITY ASSIGNMENT CLASSIFICATION

- ○ Chief Administrative Assignment (Superintendent)
- ○ Assistant Administrative Assignment (Assisting in management of policy, planning and activities)
- ○ Direction & Management (Plans & directs district wide programs)
- ○ Supervision Assignment (Overseeing and improving of staff performance in transportation, instruction, or plant, etc. programs)
- ○ Accounting Assignment
- ○ Purchasing Assignment
- ○ Testing Assignment
- ○ Social Work Assignment
- ○ Psychologist Assignment
- ○ School Direction and Management (Principal)
- ○ Assistant School Direction and Management
- ○ Attendance Assignment
- ○ Library Assignment
- ○ Counseling Assignment

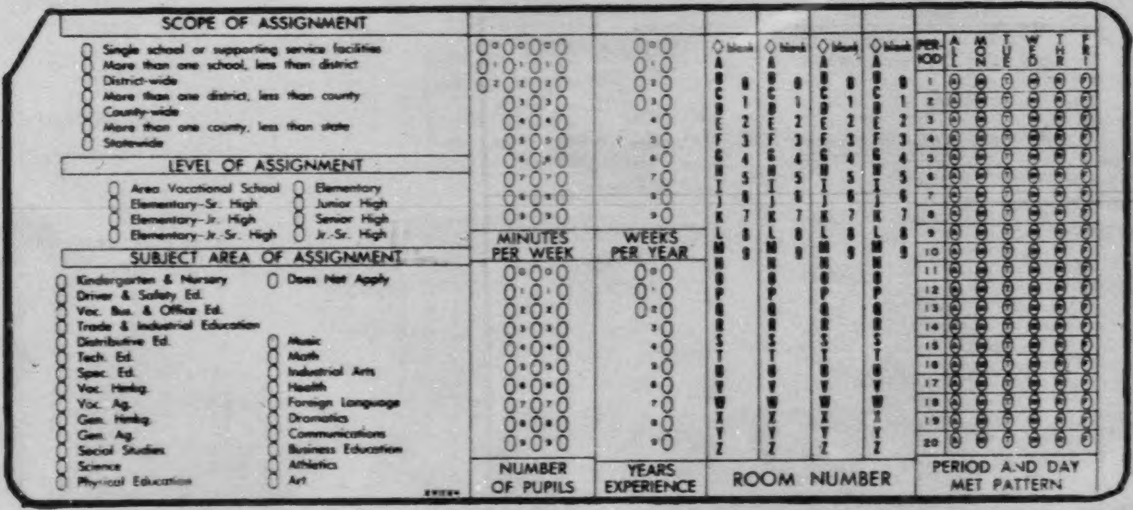
AREA OF RESPONSIBILITY

- ○ Central Office Administration. Consists of activities which have as their purpose the general regulation, directing, and control of the school system affairs that are systemwide
- ○ Individual School Administration. Consists of activities which have as their purpose aiding teaching, improving the quality of teaching, or directing and managing a school or a phase of its educational program
- ○ Attendance and School Social Work Services
- ○ Health Services
- ○ Pupil Transportation Services
- ○ Operation of Plant
- ○ Maintenance of Plant
- ○ Food Services
- ○ Student Body Activities
- ○ Community Services
- ○ Acquisition or Improvement of Fixed Assets

NON-TEACHING ASSIGNMENT CARD

FR12NT

(Back)



SCOPE OF ASSIGNMENT

- ○ Single school or supporting service facilities
- ○ More than one school, less than district
- ○ District-wide
- ○ More than one district, less than county
- ○ County-wide
- ○ More than one county, less than state
- ○ Statewide

LEVEL OF ASSIGNMENT

- ○ Area Vocational School
- ○ Elementary-Sr. High
- ○ Elementary-Jr. High
- ○ Elementary-Jr.-Sr. High
- ○ Elementary
- ○ Junior High
- ○ Senior High
- ○ Jr.-Sr. High

SUBJECT AREA OF ASSIGNMENT

- ○ Kindergarten & Nursery
- ○ Driver & Safety Ed.
- ○ Voc. Bus. & Office Ed.
- ○ Trade & Industrial Education
- ○ Distributive Ed.
- ○ Tech. Ed.
- ○ Spec. Ed.
- ○ Voc. Hmkg.
- ○ Voc. Ag.
- ○ Gen. Hmkg.
- ○ Gen. Ag.
- ○ Social Studies
- ○ Science
- ○ Physical Education
- ○ Does Not Apply
- ○ Music
- ○ Math
- ○ Industrial Arts
- ○ Health
- ○ Foreign Language
- ○ Dramatics
- ○ Communications
- ○ Business Education
- ○ Athletics
- ○ Art

MINUTES PER WEEK

WEEKS PER YEAR

NUMBER OF PUPILS

YEARS EXPERIENCE

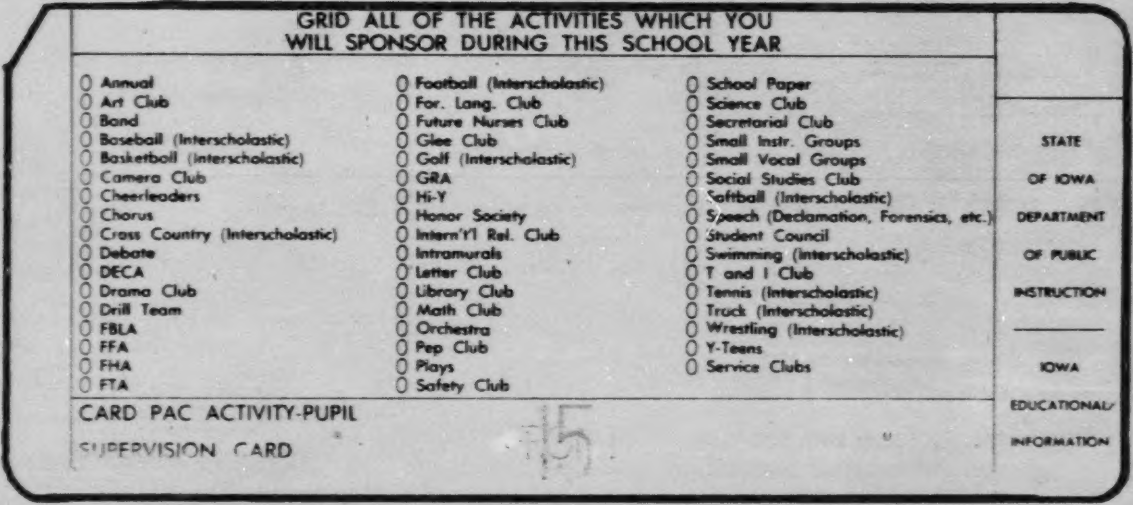
ROOM NUMBER

PERIOD AND DAY MET PATTERN

FIGURE 9

PUPIL SUPERVISION ASSIGNMENT CARD #15

(Front)



GRID ALL OF THE ACTIVITIES WHICH YOU WILL SPONSOR DURING THIS SCHOOL YEAR

○ Annual
○ Art Club
○ Band
○ Baseball (Interscholastic)
○ Basketball (Interscholastic)
○ Camera Club
○ Cheerleaders
○ Chorus
○ Cross Country (Interscholastic)
○ Debate
○ DECA
○ Drama Club
○ Drill Team
○ FBLA
○ FFA
○ FHA
○ FTA
○ Football (Interscholastic)
○ For. Lang. Club
○ Future Nurses Club
○ Glee Club
○ Golf (Interscholastic)
○ GRA
○ Hi-Y
○ Honor Society
○ Intern'tl Rel. Club
○ Intramurals
○ Letter Club
○ Library Club
○ Math Club
○ Orchestra
○ Pep Club
○ Plays
○ Safety Club
○ School Paper
○ Science Club
○ Secretarial Club
○ Small Instr. Groups
○ Small Vocal Groups
○ Social Studies Club
○ Softball (Interscholastic)
○ Speech (Declamation, Forensics, etc.)
○ Student Council
○ Swimming (Interscholastic)
○ T and I Club
○ Tennis (Interscholastic)
○ Track (Interscholastic)
○ Wrestling (Interscholastic)
○ Y-Teens
○ Service Clubs

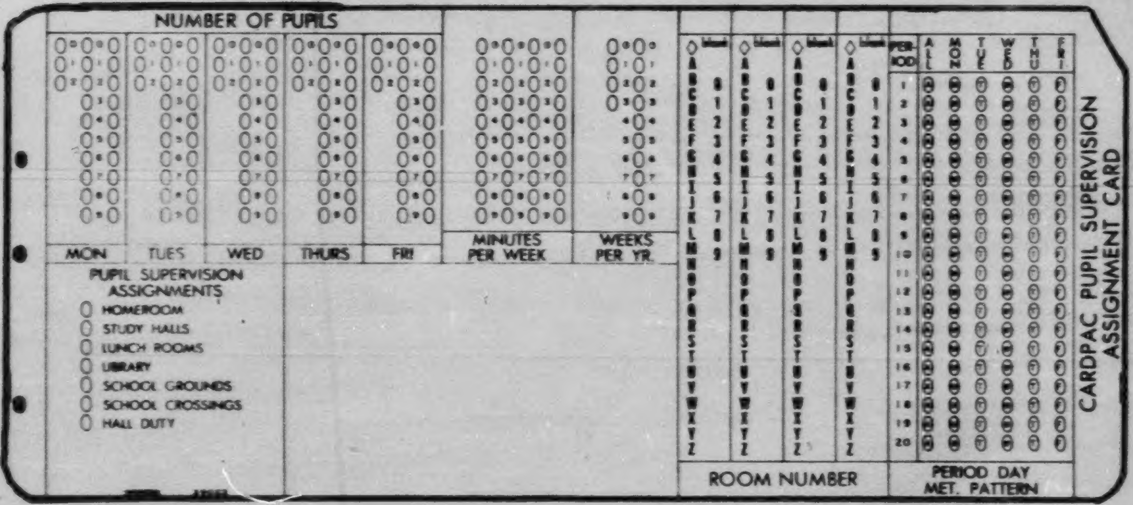
CARD PAC ACTIVITY-PUPIL SUPERVISION CARD

#15

STATE
OF IOWA
DEPARTMENT
OF PUBLIC
INSTRUCTION

IOWA
EDUCATIONAL
INFORMATION

(Back)



NUMBER OF PUPILS

MON TUES WED THURS FRI

MINUTES PER WEEK

WEEKS PER YR.

PUPIL SUPERVISION ASSIGNMENTS
○ HOMEROOM
○ STUDY HALLS
○ LUNCH ROOMS
○ LIBRARY
○ SCHOOL GROUNDS
○ SCHOOL CROSSINGS
○ HALL DUTY

ROOM NUMBER

PERIOD DAY MET. PATTERN

CARDPAC PUPIL SUPERVISION ASSIGNMENT CARD

PHASE II

STEPS 12-60: SCHOOL PROCEDURE FOR DATA TO BE RETURNED TO IEIC BY SEPTEMBER 15

12. Curriculum records for the present school year are established by updating the Curriculum Listing and revising the deck of preidentified Section Cards #6 to contain one card for each section of all courses to be offered during the 1966-67 school year.

The Curriculum List update procedure includes:

a. Adding or deleting courses and/or sections.

b. Correcting or updating the printed course information (except Local Course Number) for existing courses.

c. Adding the District Code and School Code for "Other School" when a course is taught in another school. *

d. Adding by exception the "Level of Difficulty" and "Type of Pupil" to CardPac records of course information. That is, all courses were coded "Average" (code 1) Level of Difficulty and "Regular" (code 1) Type of Pupil when processed at IEIC. Any exceptions are entered on the Curriculum List as corrections.

The deck of Section Cards is revised by:

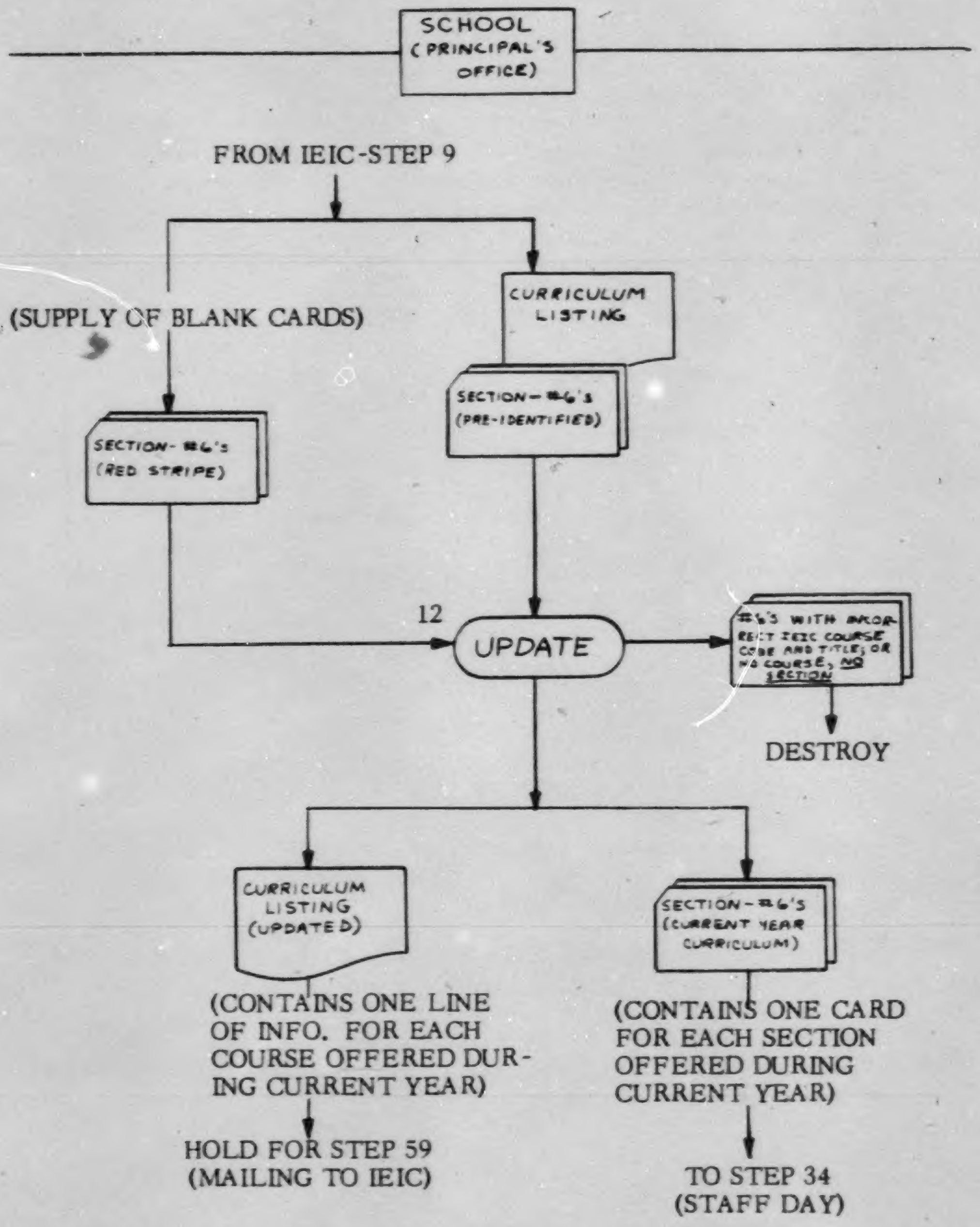
a. The addition of red striped Section Cards #6, which have been filled out for courses and/or sections added to the Curriculum List or to correct IEIC Course Code and IEIC Course Title.

b. The deletion of preidentified Section Cards #6 for non-existent courses and/or sections or with incorrect IEIC Course Codes and incorrect IEIC Course Titles.

The Curriculum List is held for return to IEIC. The deck of Section Cards #6 is next used on Staff Day.

*The school in which this course is taught does not include a section (or sections) on its Curriculum List or in its deck of Section Cards when the section is entirely composed of pupils from another school.

(ESTABLISHING CURRICULUM RECORDS FOR THE CURRENT YEAR)


SCHOOL (PRINCIPAL'S OFFICE)
FROM IEIC-STEP 9
(SUPPLY OF BLANK CARDS)
CURRICULUM LISTING
SECTION-#6'S (PRE-IDENTIFIED)
SECTION-#6'S (RED STRIPE)
12
UPDATE
#6'S WITH INCORRECT IEIC COURSE CODE AND TITLE; OR NO COURSE, NO SECTION
DESTROY
CURRICULUM LISTING (UPDATED)
SECTION-#6'S (CURRENT YEAR CURRICULUM)
(CONTAINS ONE LINE OF INFO. FOR EACH COURSE OFFERED DURING CURRENT YEAR)
(CONTAINS ONE CARD FOR EACH SECTION OFFERED DURING CURRENT YEAR)
HOLD FOR STEP 59 (MAILING TO IEIC)
TO STEP 34 (STAFF DAY)

13. The Professional Staff List, containing a preprinted list of teachers who were teaching at the close of the spring term, and the matching deck of preidentified Professional Staff Header Cards are edited and expanded to include all members of the 1966-67 professional staff. (Teachers of sections taught in another school are included.)

The Professional Staff List procedure includes:

a. Adding or deleting staff members.

b. Changing information, except Staff Code.

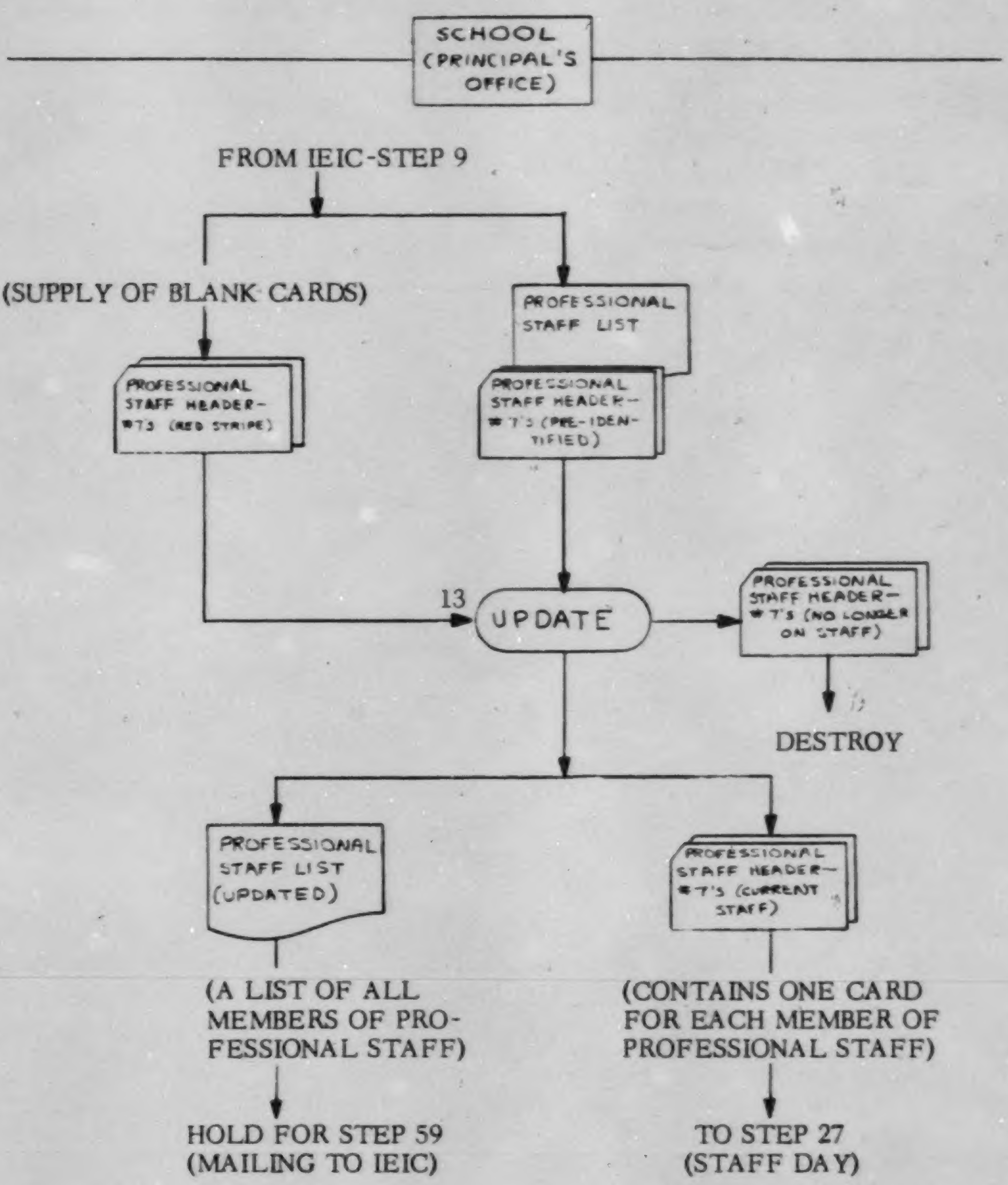
The deck of Professional Staff Header Cards is revised by:

a. The addition of red striped Professional Staff Header Cards #7, which have been filled out for non-teaching professional staff members and new teachers.

b. The deletion of preidentified Professional Staff Header Cards #7 for teachers who did not return for the current school year.

The Professional Staff List is held for return to IEIC. The deck of Professional Staff Header Cards #7 is next used on Staff Day.

(ESTABLISHING PROFESSIONAL STAFF RECORDS FOR THE CURRENT YEAR)


SCHOOL (PRINCIPAL'S OFFICE)
FROM IEIC-STEP 9
(SUPPLY OF BLANK CARDS)
PROFESSIONAL STAFF LIST
PROFESSIONAL STAFF HEADER—#T'S (RED STRIPE)
PROFESSIONAL STAFF HEADER—#T'S (PRE-IDENTIFIED)
13
UPDATE
PROFESSIONAL STAFF HEADER—#T'S (NO LONGER ON STAFF)
DESTROY
PROFESSIONAL STAFF LIST (UPDATED)
PROFESSIONAL STAFF HEADER—#T'S (CURRENT STAFF)
(A LIST OF ALL MEMBERS OF PROFESSIONAL STAFF)
(CONTAINS ONE CARD FOR EACH MEMBER OF PROFESSIONAL STAFF)
HOLD FOR STEP 59 (MAILING TO IEIC)
TO STEP 27 (STAFF DAY)

14. The portion of the Assigned Pupil Stencil Card List showing last year's twelfth grade pupils (titled "Graduate Followup Pupils") and the Stencil Cards for these pupils (grouped together as Grade "13") are selected. When one of these pupils remains in twelfth grade for the current year his name is crossed off the Graduate Followup Pupils List. His number, name, and grade are entered on the twelfth grade portion of the Assigned Pupil Stencil Card List. After circling the "13" printed for "Grade" on his stencil card and entering a "12" in the circle, his card is refiled with those for twelfth grade pupils. The Graduate Followup Pupils list and matching Pupil Stencil Cards for June 1966 graduates are given to the counselor. (Followup data are to be recorded on the back of the card in the spring of 1967.)

15. The preidentified Stencil Cards for anticipated pupils are edited by matching them against a current enrollment list from the school's records. A misspelled name or incorrect grade is corrected by circling the error on the card and entering the correct information in the circle. A record is made of each name on the enrollment list for which there is no Stencil Card.

16. The matched Stencil Card for a pupil who is not classified as "Regular Education--Resident" is used to stencil the pupil's number onto a blank Pupil Information Card #2 ("blank" meaning not individually identified in any manner, a "stock" card). The correct Educational Classification is recorded by gridding the designated oval on the back of the #2 card. The Stencil Card is filed in the matched Stencil Card Deck.

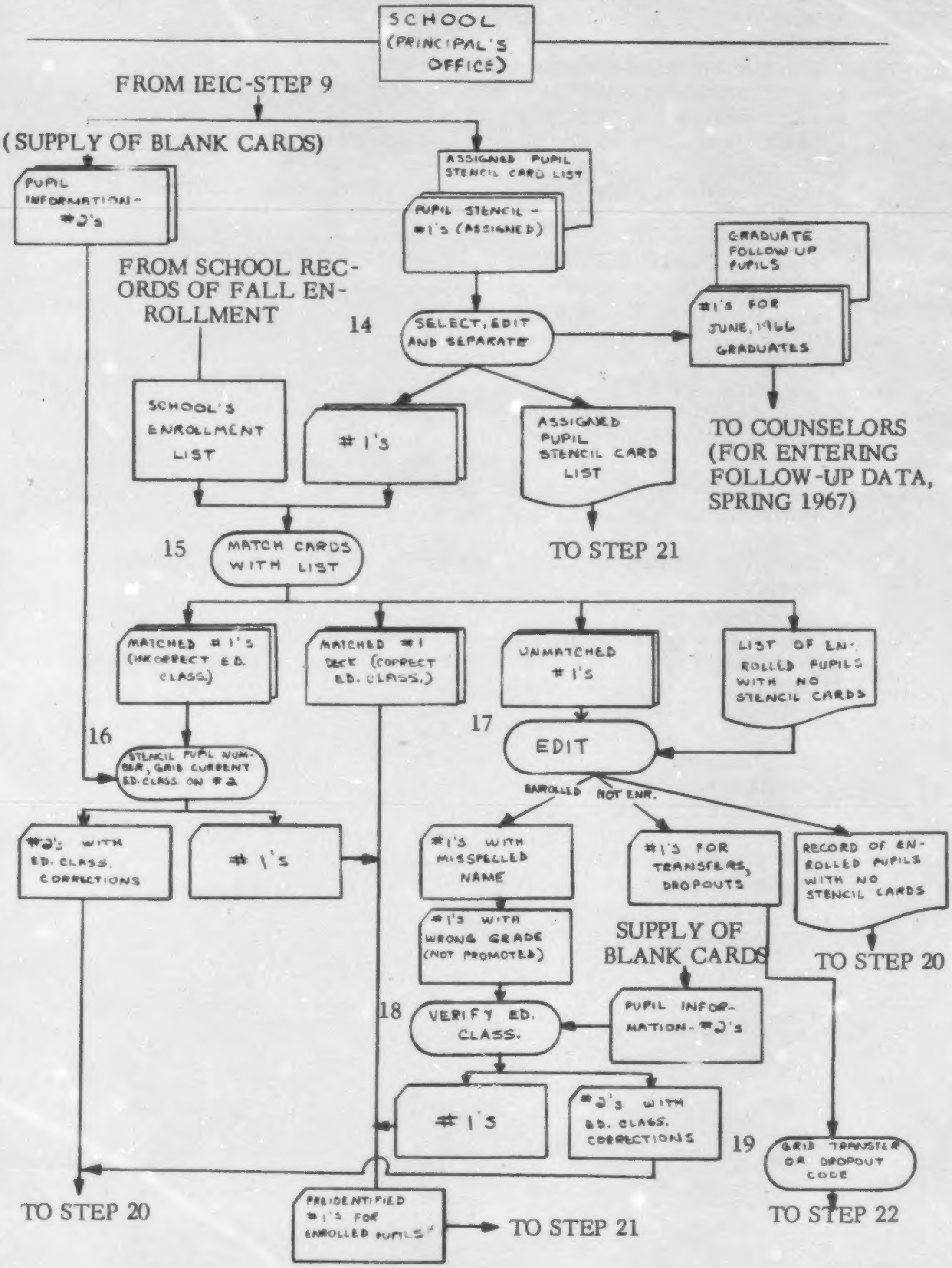
17. The unmatched Stencil Cards may include cards with misspelled names and incorrect grades for enrolled pupils. After circling these errors, the correct information is entered in the circle. The name is removed from the record of missing stencil cards.

18. The Educational Classification recorded on the StencilCards from Step 17 is verified. When correct, the stencil card is filed in the Matched Stencil Card Deck. When incorrect, the procedure shown in step 16 is followed.

19. The remaining unmatched Stencil Cards represent pupils who were anticipated but did not enroll this fall. When this is a high school admitting pupils from schools organized in a junior high pattern, the cards may represent pupils expected to enter as well as to return. All such pupils are considered either Transfers or Dropouts and are reported as such by gridding the designated oval for type on the back of the cards.

(Note: When high schools have cards for junior high pupils who were not promoted, the oval for "D21", indicating "Never Belonged in this School," is used.)

(ESTABLISHING PUPIL RECORDS FOR CURRENT SCHOOL YEAR - Page 1 of 2)


SCHOOL (PRINCIPAL'S OFFICE)
FROM IEIC-STEP 9
(SUPPLY OF BLANK CARDS)
PUPIL INFORMATION- #2's
ASSIGNED PUPIL STENCIL CARD LIST
PUPIL STENCIL - #1's (ASSIGNED)
GRADUATE FOLLOW-UP PUPILS
FROM SCHOOL RECORDS OF FALL ENROLLMENT
14
SELECT, EDIT AND SEPARATE
#1's FOR JUNE, 1966 GRADUATES
TO COUNSELORS (FOR ENTERING FOLLOW-UP DATA, SPRING 1967)
SCHOOL'S ENROLLMENT LIST
# 1's
ASSIGNED PUPIL STENCIL CARD LIST
TO STEP 21
15
MATCH CARDS WITH LIST
MATCHED #1's (INCORRECT ED. CLASS.)
MATCHED #1 DECK (CORRECT ED. CLASS.)
UNMATCHED #1's
LIST OF ENROLLED PUPILS WITH NO STENCIL CARDS
16
STENCIL PUPIL NUMBER, GRID CURRENT ED. CLASS ON #2
17
EDIT
ENROLLED
NOT ENR.
#2's WITH ED. CLASS. CORRECTIONS
# 1's
#1's WITH MISSPELLED NAME
#1's FOR TRANSFERS, DROPOUTS
RECORD OF ENROLLED PUPILS WITH NO STENCIL CARDS
TO STEP 20
#1's WITH WRONG GRADE (NOT PROMOTED)
SUPPLY OF BLANK CARDS
18
VERIFY ED. CLASS.
PUPIL INFORMATION- #2's
# 1's
#2's WITH ED. CLASS. CORRECTIONS
19
GRID TRANSFER OR DROPOUT CODE
TO STEP 20
PREIDENTIFIED #1's FOR ENROLLED PUPILS'
TO STEP 21
TO STEP 22

20. The remaining names on the list made of enrolled pupils with no stencil cards represent pupils for whom there is no CardPac record. A record is established for these new pupils by writing the name and grade of each on an Unassigned Stencil Card #1. In so doing, each pupil is assigned the pre-punched number shown on this card. The assigned number is crossed off the Unassigned Pupil Stencil Card List. Each Stencil Card is used to stencil the pupil's number onto a blank Pupil Information Card #2. Type of Entry, Day of School (entered), and Educational Classification are recorded by appropriate gridding on the back of each #2 card. The #2 cards, combined with the #2 cards used in Steps 16 and 18 to correct Educational Classification of other pupils, are held for mailing to IEIC.

21. The Pupil Number, Pupil Name, and Grade shown on the newly assigned Pupil Stencil Cards are entered by grade level on the Assigned Pupil Stencil Card List.

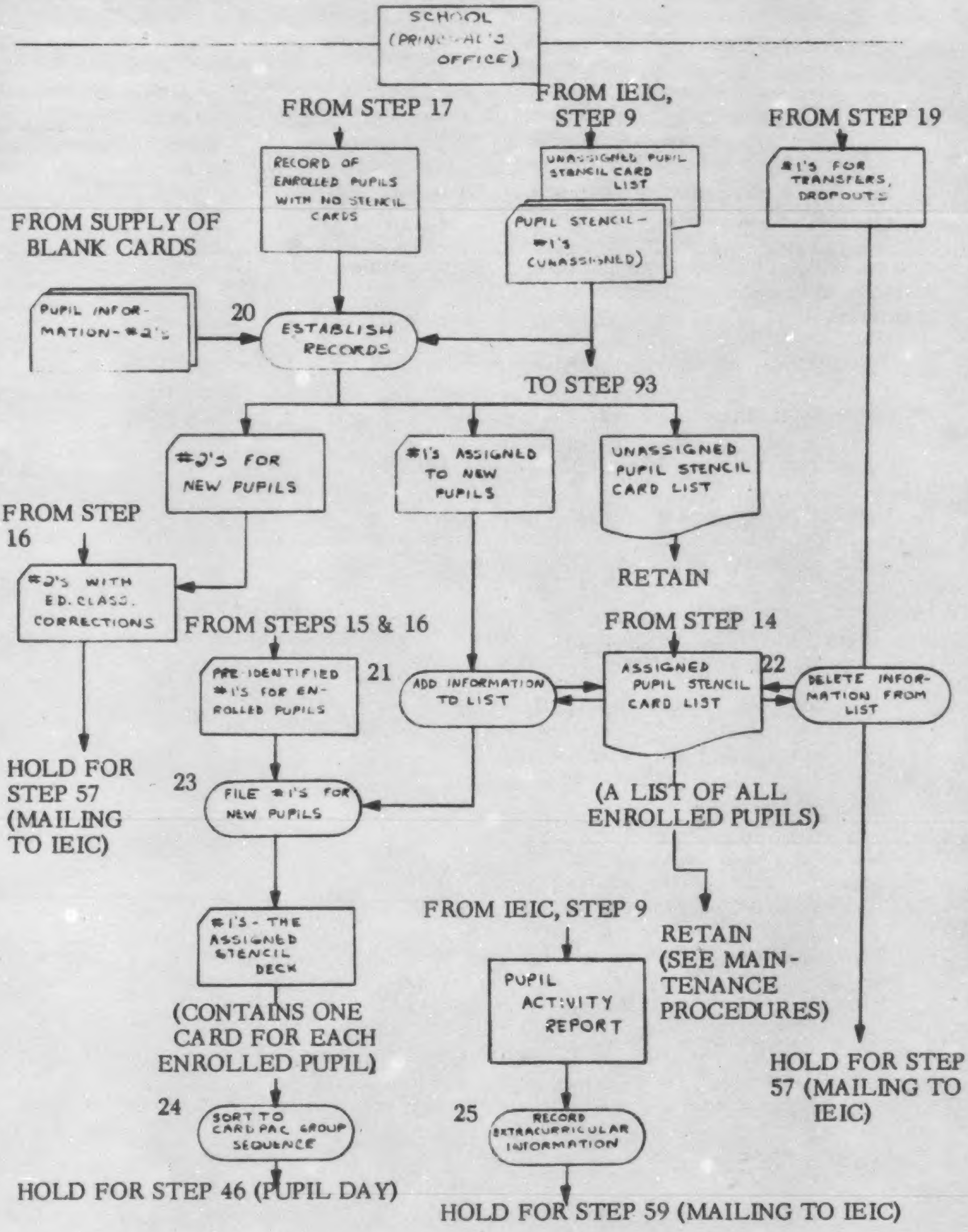
22. The names of pupils identified as dropouts and transfers from the school by the Stencil Cards from Step 19 are crossed off the Assigned Pupil Stencil Card List. The list now contains information for all but only currently enrolled pupils. The stencil cards for transfers and dropouts are held for mailing to IEIC.

23. The Stencil Cards prepared in Step 21 for pupils who did not have pre-identified Stencil Cards are filed alphabetically within grade in the matched deck of assigned Pupil Stencil Cards. With one card per pupil, the deck now represents all but only currently enrolled pupils.

24. In preparation for CardPac Pupil Day, the Assigned Pupil Stencil Cards for currently enrolled pupils are sorted for distribution to proctors of CardPac pupil groups. See Step 46.

25. The principal records cocurricular activity information as requested on the Pupil Activity Report. The report is sent to IEIC in Step 59.

(ESTABLISHING PUPIL RECORDS FOR CURRENT YEAR - Page 2 of 2)


SCHOOL (PRINCIPAL'S OFFICE)
FROM STEP 17
FROM IEIC, STEP 9
FROM STEP 19
RECORD OF ENROLLED PUPILS WITH NO STENCIL CARDS
UNASSIGNED PUPIL STENCIL CARD LIST
PUPIL STENCIL - #1'S (UNASSIGNED)
#1'S FOR TRANSFERS, DROPOUTS
FROM SUPPLY OF BLANK CARDS
PUPIL INFORMATION - #2'S
20
ESTABLISH RECORDS
TO STEP 93
#2'S FOR NEW PUPILS
#1'S ASSIGNED TO NEW PUPILS
UNASSIGNED PUPIL STENCIL CARD LIST
RETAIN
FROM STEP 16
#2'S WITH ED. CLASS. CORRECTIONS
FROM STEPS 15 & 16
FROM STEP 14
PRE-IDENTIFIED #1'S FOR ENROLLED PUPILS
21
ADD INFORMATION TO LIST
ASSIGNED PUPIL STENCIL CARD LIST
22
DELETE INFORMATION FROM LIST
HOLD FOR STEP 57 (MAILING TO IEIC)
23
FILE #1'S FOR NEW PUPILS
(A LIST OF ALL ENROLLED PUPILS)
FROM IEIC, STEP 9
#1'S - THE ASSIGNED STENCIL DECK
RETAIN (SEE MAINTENANCE PROCEDURES)
PUPIL ACTIVITY REPORT
(CONTAINS ONE CARD FOR EACH ENROLLED PUPIL)
HOLD FOR STEP 57 (MAILING TO IEIC)
24
SORT TO CARD PAC GROUP SEQUENCE
25
RECORD EXTRACURRICULAR INFORMATION
HOLD FOR STEP 46 (PUPIL DAY)
HOLD FOR STEP 59 (MAILING TO IEIC)

26. Professional staff members are asked to bring pupil N-count information to a staff meeting* at which time the total number of pupils for the following groups will be requested:

a. By grade, for each section taught.

b. An estimate, by day of the week, for each type of pupil supervision assignment. (The assignments to be reported are Homeroom, Study Halls, Lunch Rooms, Library, School Grounds, School Crossings, and Hall Duty.)

c. By type of non-teaching assignment, when applicable. (Examples: Staff Supervision, Testing, Counseling.)

27. At a meeting of all professional staff members in the school, the following materials are distributed to each member and instructions for steps 28 through 42 are given by the principal:

a. Professional Staff Header Card #7, from step 13.

b. Four Pupil Supervision Assignment Cards #15, as received from IEIC, step 9.

c. "Staff Instructions," as received from IEIC, step 9.

28. Each staff member who serves as a pupil activity advisor reports this duty (or duties) on one #15 card by gridding the oval (or ovals) on the front of the card which represents the type of activity (or activities).

29. Each staff member who has pupil supervision duties uses one #15 card to report each duty. The following information is reported by gridding the appropriate ovals on the Pupil Supervision side of the #15 card:

a. (Type of) Pupil Supervision Assignment

b. Number of pupils by day of the week (an estimate)

c. Minutes per week

d. Weeks per year

e. Room number, when applicable

f. Period and Day Met Pattern, when this assignment takes place during regular school hours.

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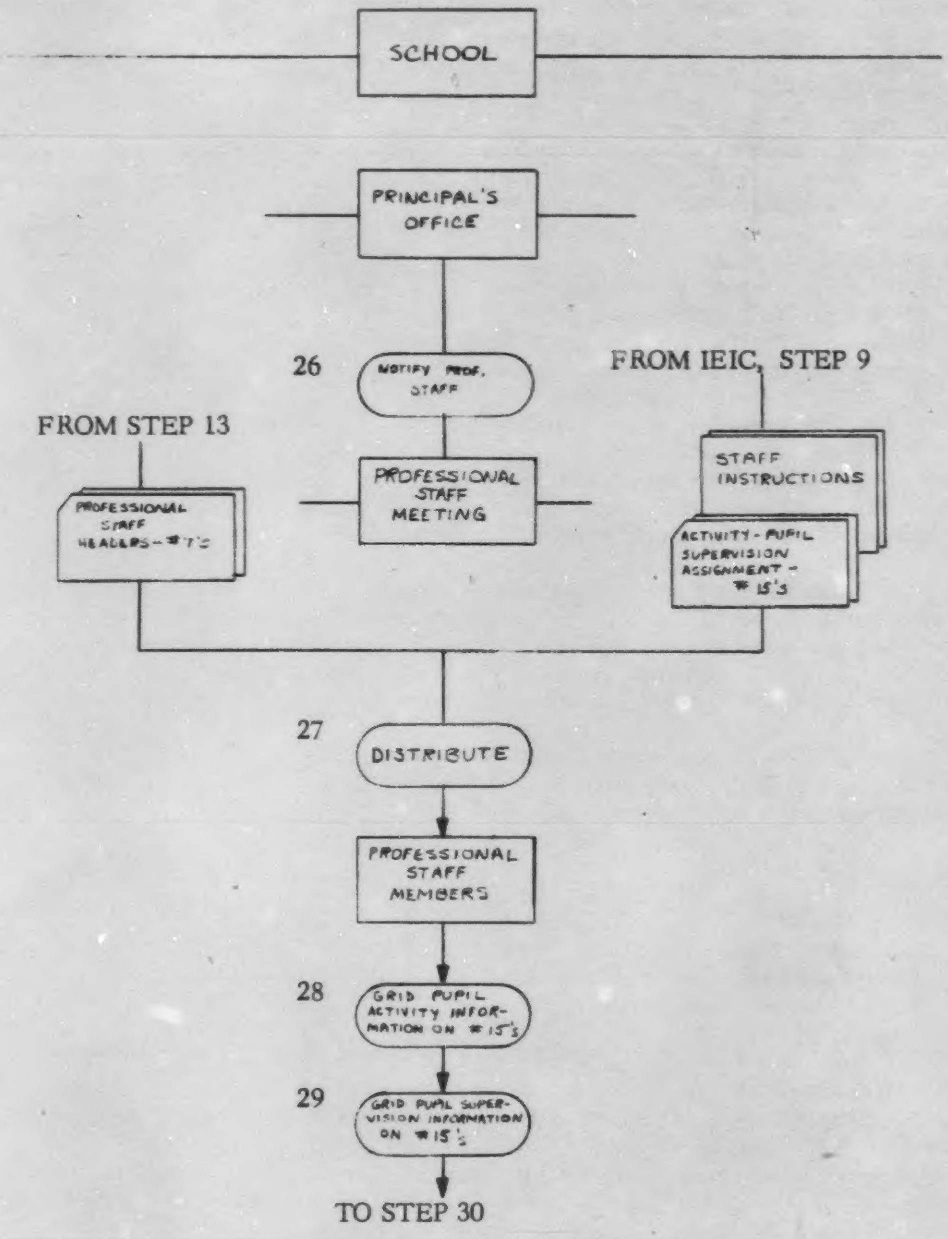
*Teachers who are members of the professional staff because they teach a section (or sections) of pupils from this school in another school are not included. The principal of this school will enter the necessary information for them. See step 43.

STAFF DAY (Page 1 of 3)
(ASSOCIATING TEACHER AND SECTION DATA, COLLECTING ADDITIONAL PROFESSIONAL STAFF AND SECTION DATA)


SCHOOL
PRINCIPAL'S OFFICE
26
NOTIFY PROF. STAFF
FROM IEIC, STEP 9
FROM STEP 13
PROFESSIONAL STAFF MEETING
STAFF INSTRUCTIONS
PROFESSIONAL STAFF HEADERS - #7'S
ACTIVITY - PUPIL SUPERVISION ASSIGNMENT - #15'S
27
DISTRIBUTE
PROFESSIONAL STAFF MEMBERS
28
GRID PUPIL ACTIVITY INFORMATION ON #15'S
29
GRID PUPIL SUPERVISION INFORMATION ON #15'S
TO STEP 30

30. Staff members are requested to make a list of their assignments which are not teaching, pupil supervision, or activity advisor, using the "Staff Instructions" as a guide. (Assignments of this type are designated as "Non-Teaching assignments".)

31. Non-Teaching Assignment Cards #12 are distributed to staff members, giving each member one card for each assignment he has listed.

32. Staff members report non-teaching assignment information on the #12 cards by gridding the appropriate oval for each of the following:

    a. Activity Assignment Classification (type of work performed)
    b. Area of Responsibility (area of service)
    c. Scope of Assignment
    d. Level of Assignment
    e. Subject Area of Assignment
    f. Minutes per Week, this assignment
    g. Weeks per Year, this assignment
    h. Number of Pupils (involved in this assignment, if any)
    i. Years of Experience, this assignment
    j. Room Number when applicable
    k. Period and Day Met Pattern, when applicable.

    Note: Each item within any classification listed in "a" through "e" above is considered a unique assignment. When more than one item in any of these classifications are applicable, a separate #12 card is used for each.

33. Each Professional Staff member without a teaching assignment assembles his cards by placing his Professional Staff Header Card #7 ahead of any Non-Teaching Assignment Cards #12 and any Pupil Supervision Assignment Cards #15. He returns his cards to the principal. (The relevant CardPac procedures for the "non-teaching" professional staff members have now been completed.)

34. Section Cards #6 are distributed to the assigned teachers. (The card for a team-taught section is given to the team captain. Teachers will not receive a section card for any sections entirely composed of pupils from another school.)

35. Teachers grid the appropriate ovals on the #6 cards in response to the following requested information:

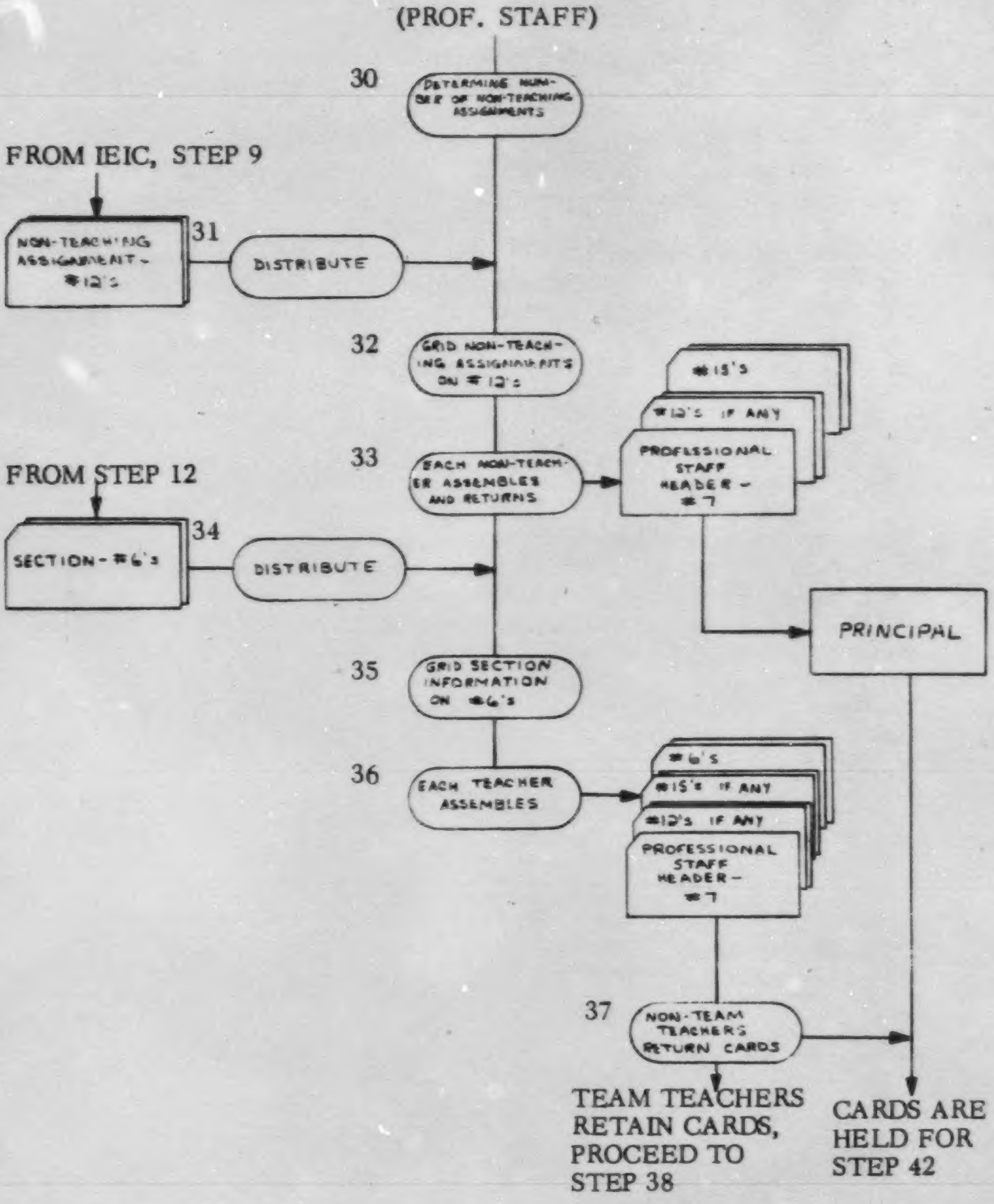
    a. Years Experience Teaching This Course Title (not including current year)
    b. Room Number
    c. Period and Day Met Pattern
    d. Number of Pupils by Grade in this Section

    Note: When a second room is used in teaching this section the Room Number and Period and Day Met Pattern for the second room are reported using the areas provided on the back.

36. Each teacher assembles his cards by placing his Professional Staff Header Card #7 ahead of any Non-Teaching Assignment Cards #12, any Pupil Supervision Assignment Cards #15, and his Section Cards #6.

37. The relevant CardPac Staff Day procedures for the teacher without team teaching assignments have been completed after his cards are returned to the principal.

STAFF DAY (Page 2 of 3)


(PROF. STAFF)
30
DETERMINE NUMBER OF NON-TEACHING ASSIGNMENTS
FROM IEIC, STEP 9
NON-TEACHING ASSIGNMENT - #12's
31
DISTRIBUTE
32
GRID NON-TEACHING ASSIGNMENTS ON #12's
#15's
#12's IF ANY
33
EACH NON-TEACHER ASSEMBLES AND RETURNS
PROFESSIONAL STAFF HEADER - #7
FROM STEP 12
SECTION - #6's
34
DISTRIBUTE
PRINCIPAL
35
GRID SECTION INFORMATION ON #6's
36
EACH TEACHER ASSEMBLES
#6's
#15's IF ANY
#12's IF ANY
PROFESSIONAL STAFF HEADER - #7
37
NON-TEAM TEACHERS RETURN CARDS
TEAM TEACHERS RETAIN CARDS, PROCEED TO STEP 38
CARDS ARE HELD FOR STEP 42

38. Blank (red striped) Professional Staff Header Cards #7 are distributed to team teachers, providing each team captain and each team member with one #7 card for each section in which he team teaches.

39. Team teachers identify each #7 card by printing District Code, School Code, Staff Code and Name in the areas provided across the top of the card.

40. Team members give one Staff Card #7 to the team captain of each section in which they team teach.

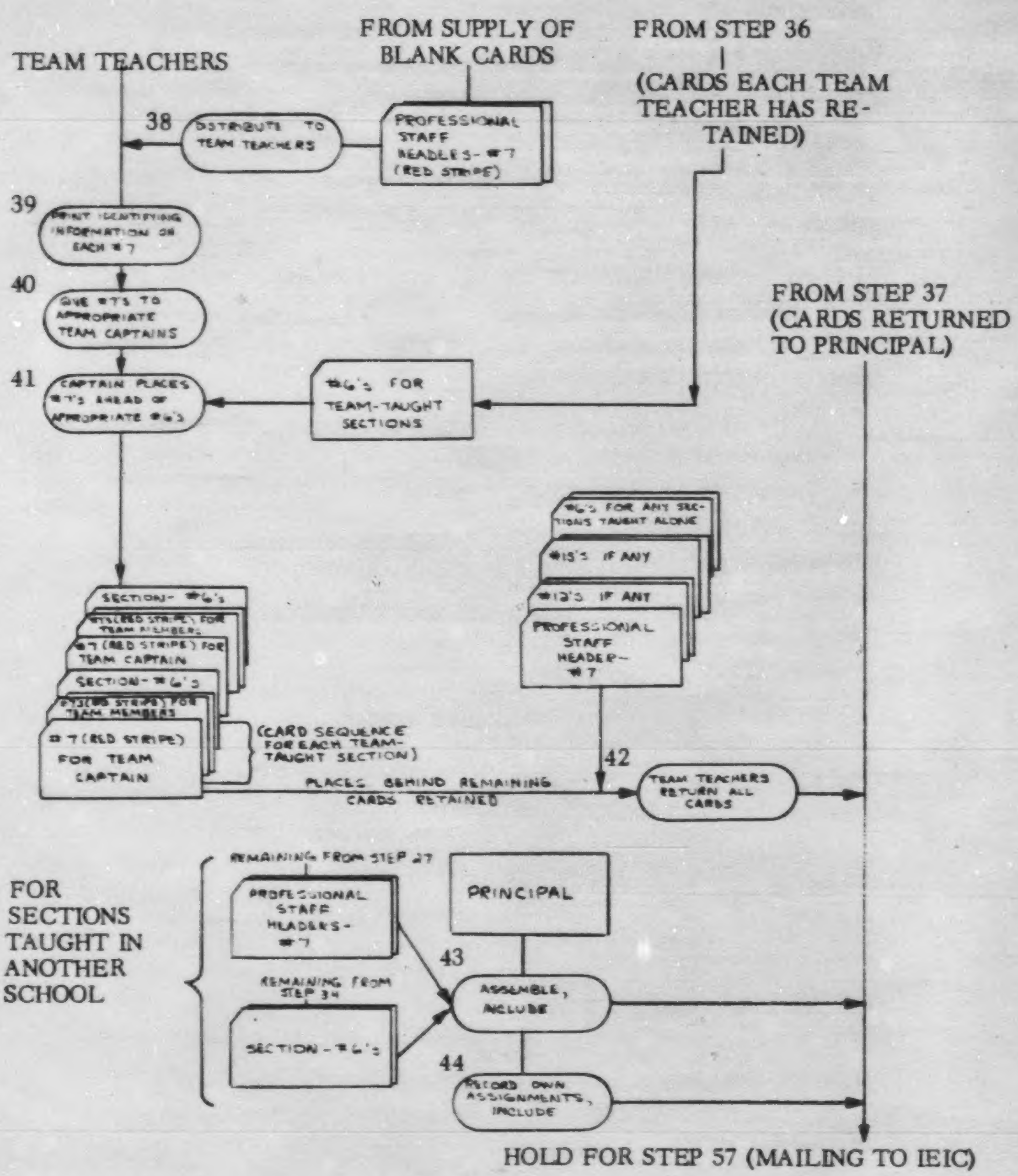
41. From the cards he assembled in Step 36 each team captain selects the completed Section Card #6 for each team-taught section. He places the respective Staff Cards #7 in front of each Section Card #6, placing his own Staff Card on top. He then places these groups of cards for team-taught sections behind the remaining cards he assembled in Step 36.

42. The team captains return their assembled cards to the principal. (Procedures for team teachers have been completed.)

43. The principal assembles the cards for sections taught in another school by placing the respective Professional Staff Header Card #7 ahead of each Section Card #6, and includes them with the cards from CardPac Staff Day. (Years of Experience, Room Number, Period and Day Met Pattern, and Number of Pupils are not reported.)

44. The principal records information pertinent to his assignments by following the appropriate directions of Steps 26 through 41. He places his own cards with the cards from other staff members and holds them for mailing to IEIC in Step 57.

STAFF DAY (Page 3 of 3)


TEAM TEACHERS
FROM SUPPLY OF BLANK CARDS
FROM STEP 36
(CARDS EACH TEAM TEACHER HAS RE-TAINED)
38
DISTRIBUTE TO TEAM TEACHERS
PROFESSIONAL STAFF HEADERS - #7 (RED STRIPE)
39
PRINT IDENTIFYING INFORMATION ON EACH #7
40
GIVE #7'S TO APPROPRIATE TEAM CAPTAINS
FROM STEP 37
(CARDS RETURNED TO PRINCIPAL)
41
CAPTAIN PLACES #7'S AHEAD OF APPROPRIATE #6'S
#6'S FOR TEAM-TAUGHT SECTIONS
#6'S FOR ANY SECTIONS TAUGHT ALONE
#15'S IF ANY
#12'S IF ANY
PROFESSIONAL STAFF HEADER - #7
SECTION - #6'S
#7'S (RED STRIPE) FOR TEAM MEMBERS
#7 (RED STRIPE) FOR TEAM CAPTAIN
SECTION - #6'S
#7'S (RED STRIPE) FOR TEAM MEMBERS
#7 (RED STRIPE) FOR TEAM CAPTAIN
(CARD SEQUENCE FOR EACH TEAM-TAUGHT SECTION)
42
PLACES BEHIND REMAINING CARDS RETAINED
TEAM TEACHERS RETURN ALL CARDS
FOR SECTIONS TAUGHT IN ANOTHER SCHOOL
REMAINING FROM STEP 27
PROFESSIONAL STAFF HEADERS - #7
PRINCIPAL
43
ASSEMBLE, INCLUDE
REMAINING FROM STEP 34
SECTION - #6'S
44
RECORD OWN ASSIGNMENTS, INCLUDE
HOLD FOR STEP 57 (MAILING TO IEIC)

45. The principal finalizes local plans for Pupil Day and determines the make-up procedure for anticipated absentees.

46. Materials are assembled and distributed to CardPac proctors for their review prior to Pupil Day. Each proctor receives the Assigned Pupil Stencil Cards #1 for his group, a supply of blank Pupil Information Cards #2 to equal the number of pupils in his group, and a copy of the "Proctor's Instructions."

47. The proctor of each CardPac Group distributes the Assigned Pupil Stencil Card #1 and one blank Pupil Information Card #2 to each pupil. (The #1 cards for absent pupils establish a record of pupils to be included in the make-up procedure.)

48. Each pupil enters information on his Stencil Card #1 in accordance with the following conditions:

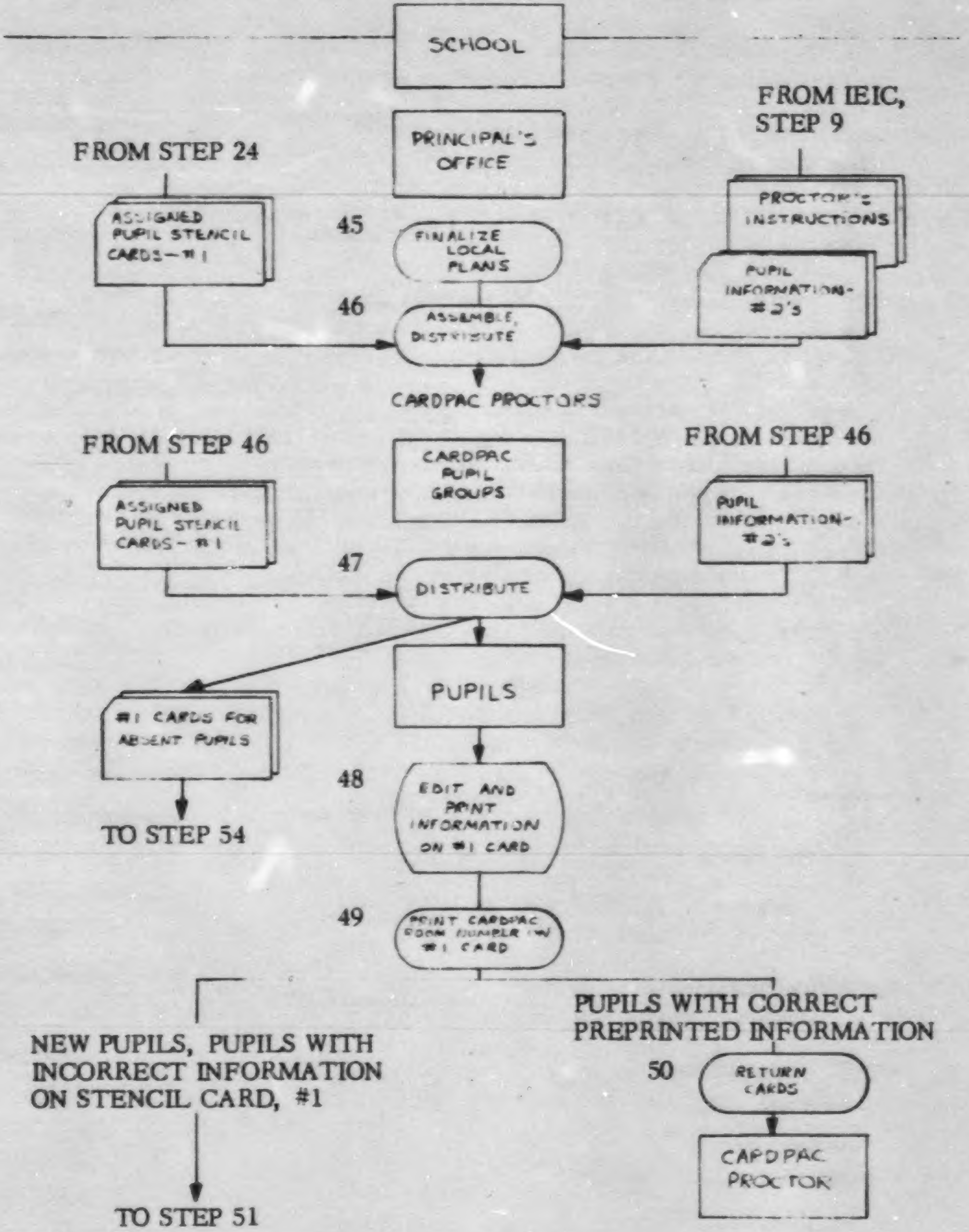
    a. Pupils with preprinted Stencil Cards from IEIC edit name, birthdate, grade, sex, father's occupation code, and mother's occupation code by crossing out any incorrect information and printing the correction above it.

    b. Pupils with Stencil Cards assigned in the local school office this fall (Step 20) print their birthdate, sex, father's occupation code, and mother's occupation code in the spaces provided.

49. Each pupil identifies his stencil card as one of this CardPac group by printing his CardPac Room Number in the area labeled "Homeroom."

50. The proctor collects the Stencil Cards #1 and the blank Pupil Information Cards #2 from pupils who made no corrections on their stencil cards.

PUPIL DAY (Page 1 of 2)
(UPDATING AND ENTERING PUPIL INFORMATION)


SCHOOL
FROM STEP 24
PRINCIPAL'S OFFICE
FROM IEIC, STEP 9
ASSIGNED PUPIL STENCIL CARDS—#1
45
FINALIZE LOCAL PLANS
PROCTOR'S INSTRUCTIONS
PUPIL INFORMATION-#2's
46
ASSEMBLE, DISTRIBUTE
CARDPAC PROCTORS
FROM STEP 46
CARDPAC PUPIL GROUPS
FROM STEP 46
ASSIGNED PUPIL STENCIL CARDS - #1
PUPIL INFORMATION-#2's
47
DISTRIBUTE
PUPILS
#1 CARDS FOR ABSENT PUPILS
TO STEP 54
48
EDIT AND PRINT INFORMATION ON #1 CARD
49
PRINT CARDPAC ROOM NUMBER ON #1 CARD
PUPILS WITH CORRECT PREPRINTED INFORMATION
NEW PUPILS, PUPILS WITH INCORRECT INFORMATION ON STENCIL CARD, #1
50
RETURN CARDS
CARDPAC PROCTOR
TO STEP 51

51. Each pupil who has information on his Stencil Card #1 that was either printed by him or entered by the local school enters this same information on the Pupil Information Card, #2. When name is entered, it is printed and gridded. Any other information is entered by gridding the appropriate ovals in the designated areas.

52. The proctor collects the Stencil Cards #1 and the used Pupil Information Cards #2.

53. The proctor groups together the Stencil Cards #1 from Step 50 and Step 52 in alphabetic sequence, places a rubber band around them, and labels them "CardPac Completed."

54. The proctor alphabetizes the Stencil Cards #1 for absent pupils, places a rubber band around them, and labels them "Absent on CardPac Day." He places a rubber band around the Pupil Information Cards #2 that were used by the pupils and labels them "Additions to the File." He places a rubber band around the unused Pupil Information Cards #2 and labels them "Unused." He returns these groups and the Stencil Cards grouped in Step 53 to the principal.

55. The principal assembles the cards received from all CardPac proctors for disposition as follows:

    a. Stencil Cards #1 for pupils who have completed CardPac procedures are placed in the CardPac Current File. With cards in alphabetic sequence within CardPac Room Number, this file is retained by the school.

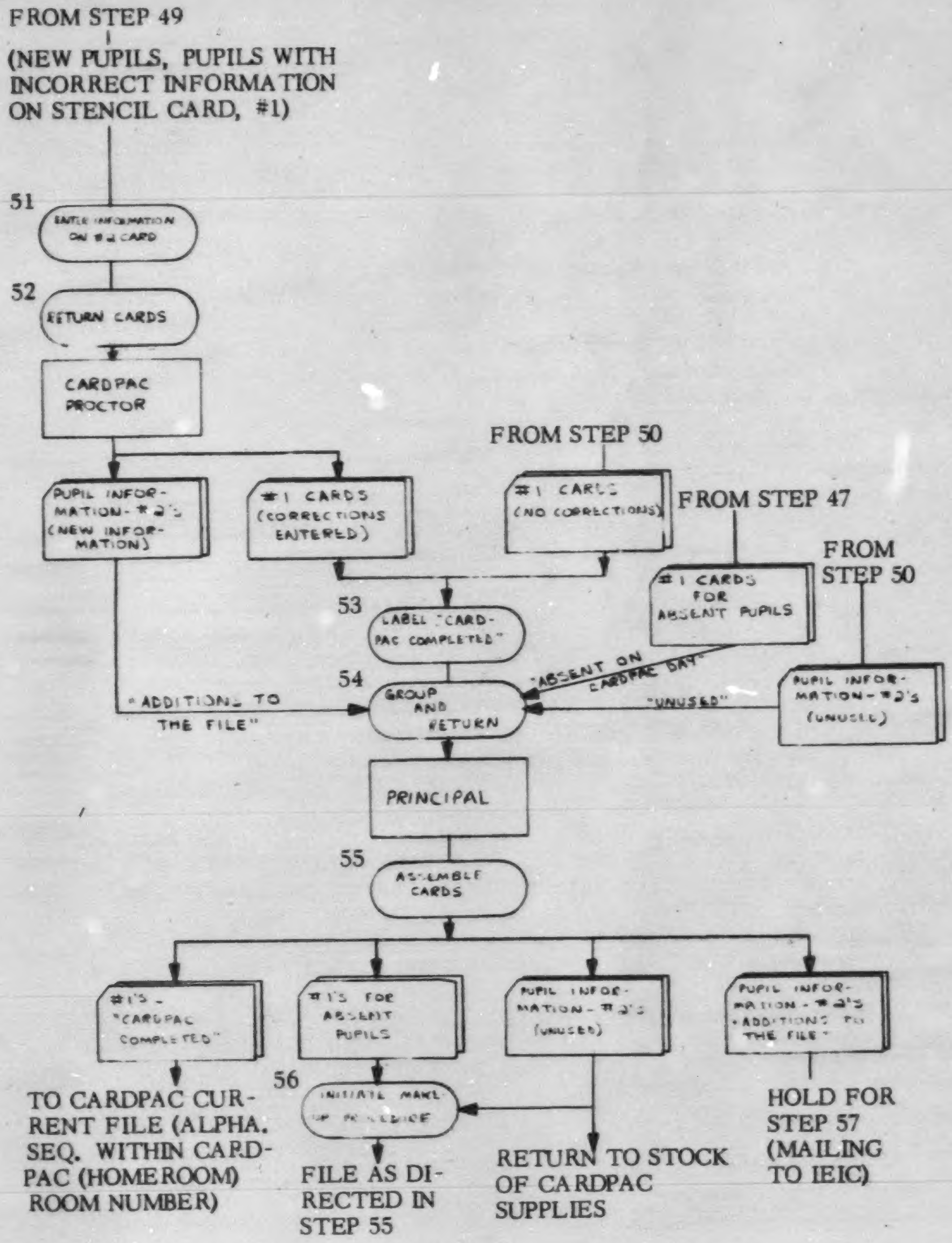
    b. Stencil Cards #1 for absent pupils are held for Step 56.

    c. Unused Pupil Information Cards #2 are returned to the stock of CardPac supplies.

    d. Pupil Information Cards #2 containing information to be added to the CardPac records are held for mailing to IEIC in step 57.

56. The principal initiates the make-up procedure for absent pupils. When completed, the cards from this procedure are filed as directed in step 55.

PUPIL DAY (Page 2 of 2)


FROM STEP 49
(NEW PUPILS, PUPILS WITH INCORRECT INFORMATION ON STENCIL CARD, #1)
51
ENTER INFORMATION ON #2 CARD
52
RETURN CARDS
CARDPAC PROCTOR
PUPIL INFORMATION - #2's (NEW INFORMATION)
#1 CARDS (CORRECTIONS ENTERED)
FROM STEP 50
#1 CARDS (NO CORRECTIONS)
FROM STEP 47
#1 CARDS FOR ABSENT PUPILS
FROM STEP 50
53
LABEL "CARDPAC COMPLETED"
54
GROUP AND RETURN
"ADDITIONS TO THE FILE"
"ABSENT ON CARDPAC DAY"
"UNUSED"
PUPIL INFORMATION - #2's (UNUSED)
PRINCIPAL
55
ASSEMBLE CARDS
#1's - "CARDPAC COMPLETED"
#1's FOR ABSENT PUPILS
PUPIL INFORMATION - #2's (UNUSED)
PUPIL INFORMATION - #2's "ADDITIONS TO THE FILE"
56
INITIATE MAKE UP PROCEDURE
TO CARDPAC CURRENT FILE (ALPHA. SEQ. WITHIN CARDPAC (HOMEROOM) ROOM NUMBER)
FILE AS DIRECTED IN STEP 55
RETURN TO STOCK OF CARDPAC SUPPLIES
HOLD FOR STEP 57 (MAILING TO IEIC)

57. The groups of cards to be mailed to IEIC are boxed in the following order:

   a. The Pupil Stencil Cards #1 from Step 22. These cards report pupils who have dropped or transferred from the school.

   b. One blank divider card.

   c. The Pupil Information Cards #2. These include the cards combined in Step 20, which report changes in Educational Classification for pupils previously registered in CardPac and report Type of Entry, Day of School (entered), and Educational Classification for new pupils, and the cards from Step 55, containing new and changed information reported by pupils.

   d. One blank divider card.

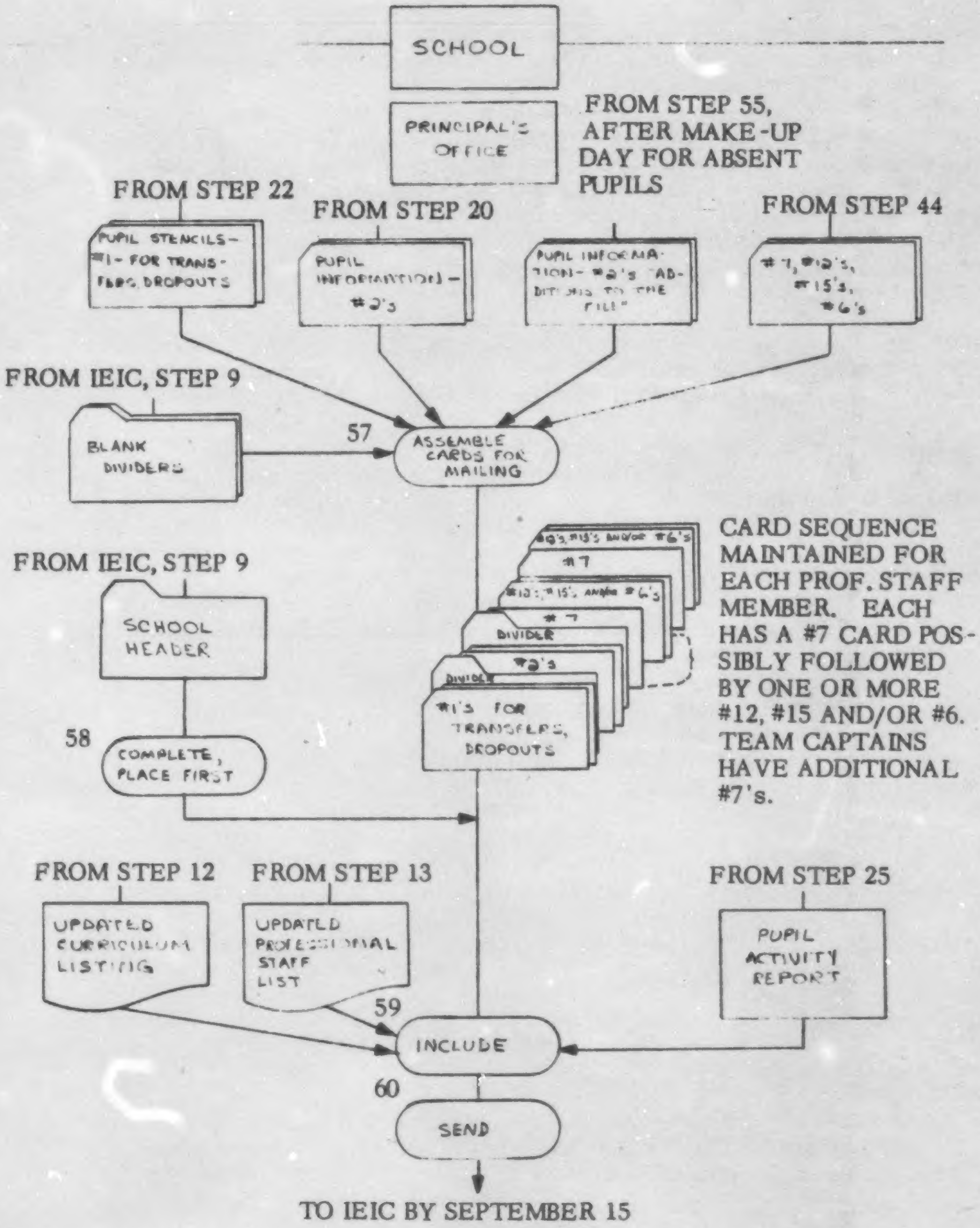
   e. The group of cards collected from professional staff members in Step 44. These cards report current information about administration, supervision, instruction, curriculum, services and facilities. This information is associated with the pertinent individual professional staff member through the sequence of the cards. In effect, the sequence reports the relationship. For this reason, maintaining the sequence of the cards for each staff member as he returned them in Step 44 is essential. (Each person returned a Professional Staff Header Card #7 and possibly one or more Non-Teaching Assignment #12, Pupil Supervision Assignment Cards #15, and/or Section Cards #6. Cards from captains of team-taught sections include additional Professional Staff Header Cards #7.)

58. After District Code, School Code, School Name, and Enrollment by Grade are printed on a School Header Card, it is inserted in front of the assembled cards. When more than one carton is used, a School Header Card indicating District Code, School Code, and School Name is inserted as the first card in each additional carton. Cartons are numbered on the outside. For example, a school with two cartons numbers them "1 of 2" and "2 of 2."

59. The two copies of the updated Curriculum Listing from Step 12, the updated Professional Staff List from Step 13, and the completed Pupil Activity Report from Step 25 are included with the assembled cards.

60. The assembled information is sent to IEIC by September 15th.

(SUBMITTING INFORMATION FROM FALL PROCEDURES TO IEIC)


SCHOOL
PRINCIPAL'S OFFICE
FROM STEP 55, AFTER MAKE-UP DAY FOR ABSENT PUPILS
FROM STEP 22
PUPIL STENCILS– #1– FOR TRANSFERS, DROPOUTS
FROM STEP 20
PUPIL INFORMATION – #2's
PUPIL INFORMATION – #2's "ADDITIONS TO THE FILE"
FROM STEP 44
#7, #12's, #15's, #6's
FROM IEIC, STEP 9
BLANK DIVIDERS
57
ASSEMBLE CARDS FOR MAILING
#12's, #15's AND/OR #6's
#7
#12's, #15's AND/OR #6's
#7
DIVIDER
#2's
DIVIDER
#1's FOR TRANSFERS, DROPOUTS
CARD SEQUENCE MAINTAINED FOR EACH PROF. STAFF MEMBER. EACH HAS A #7 CARD POSSIBLY FOLLOWED BY ONE OR MORE #12, #15 AND/OR #6. TEAM CAPTAINS HAVE ADDITIONAL #7's.
FROM IEIC, STEP 9
SCHOOL HEADER
58
COMPLETE, PLACE FIRST
FROM STEP 12
UPDATED CURRICULUM LISTING
FROM STEP 13
UPDATED PROFESSIONAL STAFF LIST
FROM STEP 25
PUPIL ACTIVITY REPORT
59
INCLUDE
60
SEND
TO IEIC BY SEPTEMBER 15

STEPS 61-70: DISTRICT AND COUNTY OFFICE PROCEDURE FOR DATA TO BE RETURNED TO IEIC BY SEPTEMBER 23

61. Identifying information is recorded on the "District and County Professional Staff List" report form received from IEIC in Step 11. Districts print District Name, District Code and "000" for School Code. Counties print County Name, "0000" for District Code, and the county number preceded by a "0" for School Code. The name, Social Security Number, and Staff Code number are recorded for each professional staff member of the respective district or county office. The order of the list is of no consequence to the data processing system. The last name is printed first, followed by the first name and middle initial, using one boxed space for each letter and for a space between each name. Three-digit staff code numbers are assigned, beginning with "001." The pages of the report form are identified. For example, a two-page list would be numbered "1 of 2," "2 of 2."

62. Each office determines the method it will use in collecting information from staff members. The suggested staff meeting procedure presented in Steps 63 through 68 indicates what information is requested and the prescribed order of completed cards.

63. At a meeting of all professional staff members one blank Professional Staff Header Card #7 and a copy of the "County Office and District Office Staff Instructions" are distributed to each person.

64. Each staff member completes a Professional Staff Header Card #7 by printing information in the designated areas across the top of the card, as follows:

    a. District personnel print District Code, "000" for School Code, Staff Code, and name.

    b. County personnel print "0000" for District Code, the county number preceded by "0" for School Code, Staff Code, and name.

65. Staff members are requested to make a list of their non-teaching assignments, using the "Staff Instructions" as a guide.

66. Non-Teaching Assignment Cards #12 are distributed to staff members, giving each member one card for each assignment he has listed.

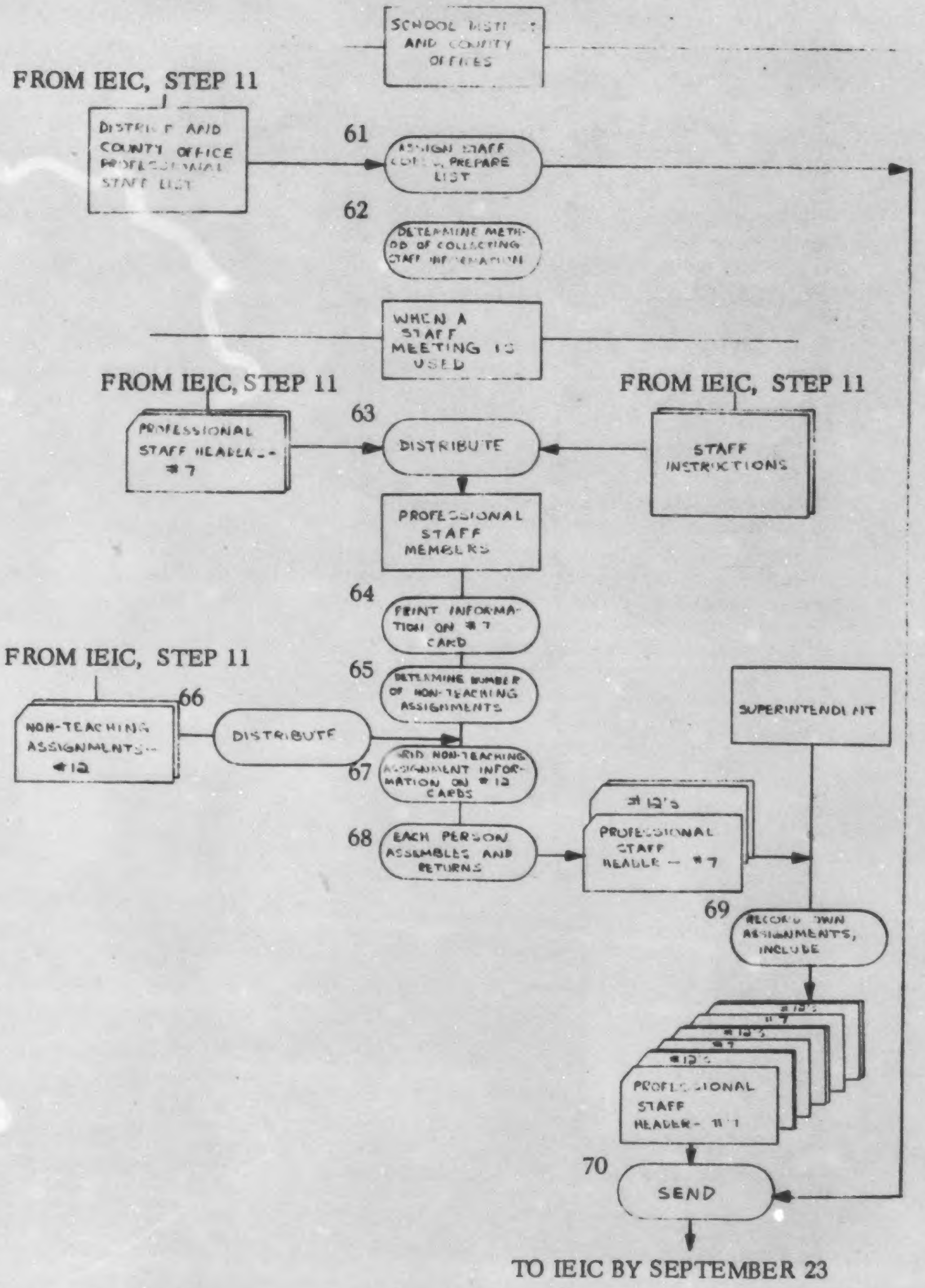
67. Staff members grid appropriate ovals on the #12 cards. (See Step #32 for items of information reported.)

68. Each person assembles his cards by placing his Professional Staff Header Card #7 ahead of his Non-Teaching Assignment Cards #12 and returns them in this order to the superintendent.

69. The superintendent completes his own Professional Staff Header Card #7 and Non-Teaching Assignment Cards #12. With his #7 card ahead of his #12 cards, he includes them with the group of cards collected from his professional staff.

70. Rubber bands are placed around the grouped cards to maintain the proper sequence. With a #7 card followed by the #12 cards for each person on the professional staff, the cards and the Professional Staff List are sent to IEIC by September 23.

(ESTABLISHING PROFESSIONAL STAFF RECORDS)


SCHOOL DISTRICT AND COUNTY OFFICES
FROM IEIC, STEP 11
DISTRICT AND COUNTY OFFICE PROFESSIONAL STAFF LIST
61
ASSIGN STAFF CODES, PREPARE LIST
62
DETERMINE METHOD OF COLLECTING STAFF INFORMATION
WHEN A STAFF MEETING IS USED
FROM IEIC, STEP 11
PROFESSIONAL STAFF HEADER -- #7
63
DISTRIBUTE
FROM IEIC, STEP 11
STAFF INSTRUCTIONS
PROFESSIONAL STAFF MEMBERS
64
PRINT INFORMATION ON #7 CARD
FROM IEIC, STEP 11
65
DETERMINE NUMBER OF NON-TEACHING ASSIGNMENTS
66
NON-TEACHING ASSIGNMENTS -- #12
DISTRIBUTE
67
GRID NON-TEACHING ASSIGNMENT INFORMATION ON #12 CARDS
68
EACH PERSON ASSEMBLES AND RETURNS
#12's
PROFESSIONAL STAFF HEADER -- #7
SUPERINTENDENT
69
RECORD OWN ASSIGNMENTS, INCLUDE
#12's
#7
#12's
#7
#12's
PROFESSIONAL STAFF HEADER - #7
70
SEND
TO IEIC BY SEPTEMBER 23

PHASE III

STEPS 71-90: IEIC PROCEDURE FOR OCTOBER 15 SHIPMENT TO SCHOOLS

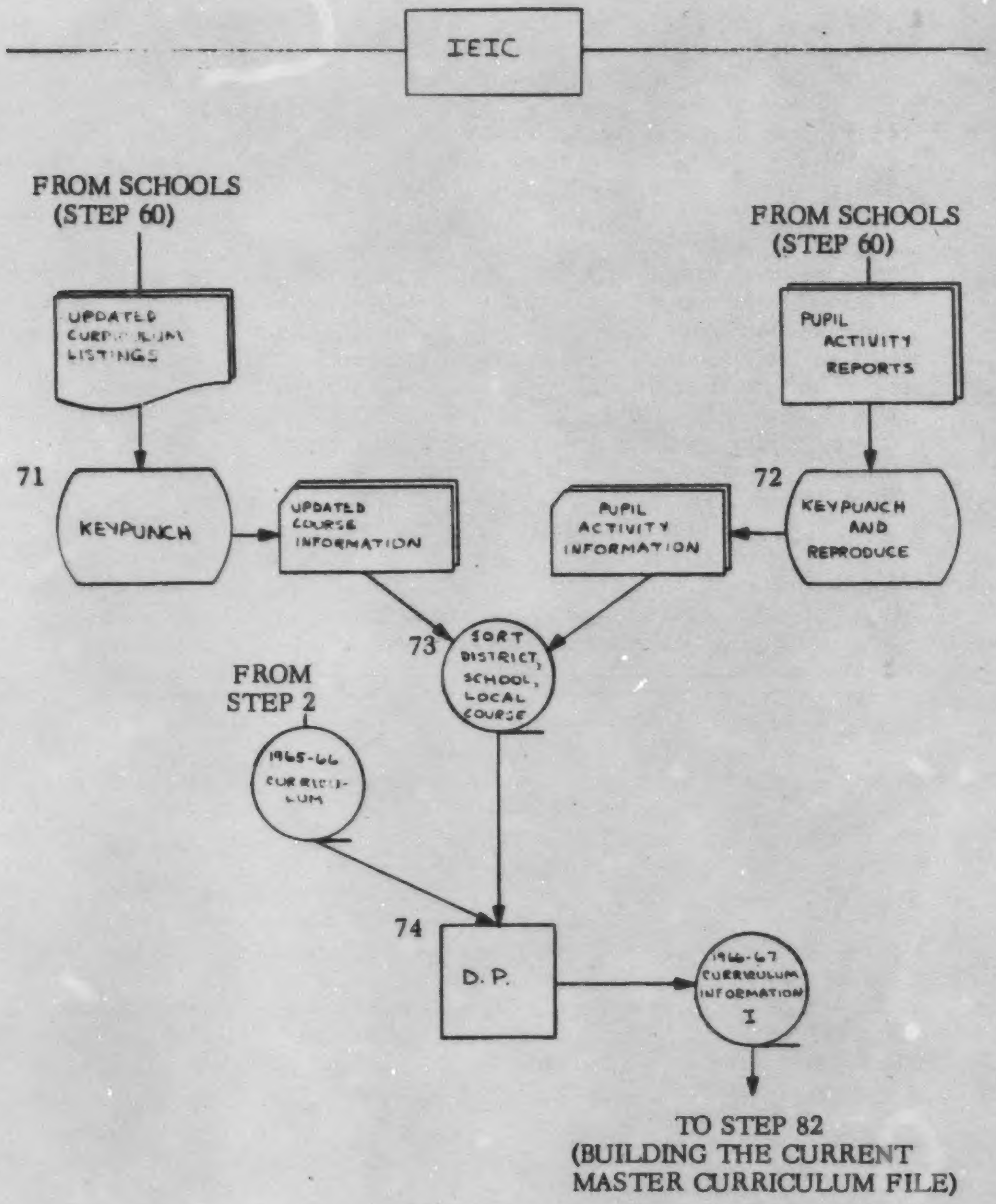
71. With the exception of the "Number of Sections Offered" (first semester, second semester, and/or as an all-year course), all data entered by the schools on the Curriculum Listings, including deletions, are keypunched as "Updated Course Information."

72. Pupil activity information is keypunched from the Pupil Activity Reports returned by the schools in Step 60. Activities are treated as courses, with the IEIC Number as an IEIC Course Number. When the cards are reproduced a Local Course Number is punched by assigning a "9" plus the last two digits of the IEIC Number to this field.

73. The cards from Steps 71 and 72 are sorted to District Code, School Code, and Local Course Number sequence.

74. The 1965-66 Curriculum Tape File created from Spring 1965-66 CardPac data is updated by processing it with the cards from Step 73 and creating the Curriculum Information Tape File I.

(ESTABLISHING CURRENT SCHOOL RECORDS - Page 1 of 4)


IEIC
FROM SCHOOLS (STEP 60)
UPDATED CURRICULUM LISTINGS
FROM SCHOOLS (STEP 60)
PUPIL ACTIVITY REPORTS
71
KEYPUNCH
UPDATED COURSE INFORMATION
PUPIL ACTIVITY INFORMATION
72
KEYPUNCH AND REPRODUCE
73
SORT DISTRICT, SCHOOL, LOCAL COURSE
FROM STEP 2
1965-66 CURRICULUM
74
D. P.
1966-67 CURRICULUM INFORMATION I
TO STEP 82 (BUILDING THE CURRENT MASTER CURRICULUM FILE)

75. All data entered by the schools on the Professional Staff Lists are keypunched as "Updated Staff Information."

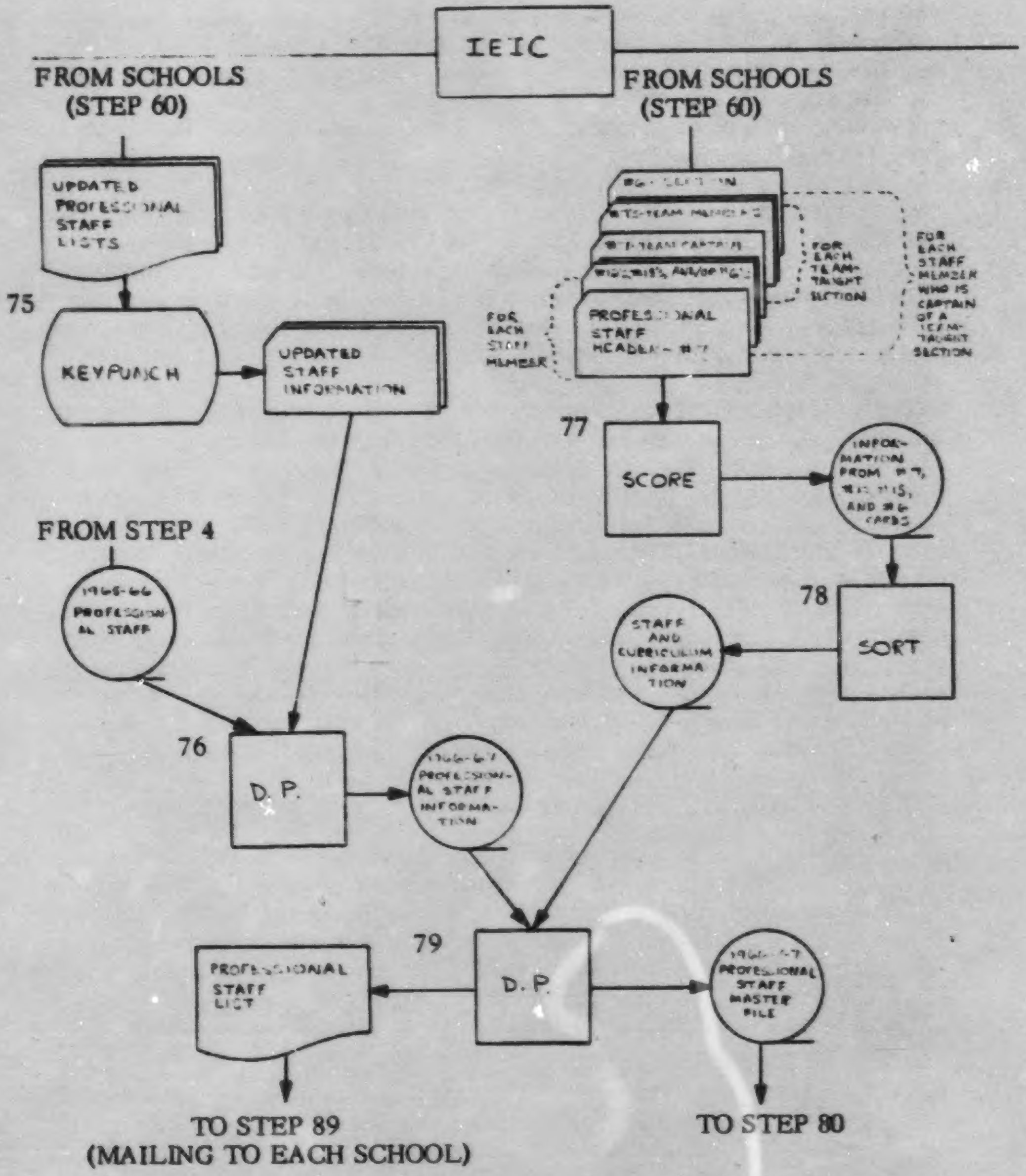
76. The 1965-66 Professional Staff Tape File created from Spring 1965-66 CardPac data is updated by processing it with the cards from Step 75 and creating a 1966-67 Professional Staff Tape File.

77. The Professional Staff Header #7 and its respective #6, 12 and 15 cards (Non-Teaching Assignment #12, Pupil Supervision Assignment #15, and Section #6) are scored and serially numbered in the sequence received from schools in Step 60. The "scoring" process includes the creation of a tape file containing a record of the prepunched and gridded information and the serial number from each 12, 15 and 6 card. Each of these records also contains the Staff Code of the preceding #7 card. Multiple section records are created for each team-taught section to provide one section record for each teacher of the team. Card sequence is used to create a "Type of Teacher" code in each section record which indicates team captain, team member, or sole teacher.

78. Information on the tape created in Step 77 is sorted to produce a work file of the same staff and curriculum information in District Code, School Code, Staff Code, Record Type, and Course Number Sequence. The sort provides teacher and section information in teacher code sequence. Section records for each teacher include any team-taught sections.

79. A 1966-67 Staff File containing one record for each staff member is created. Each record includes the Staff Name and Social Security Number from the 1966-67 Professional Information Tape File and all of the information from the Staff and Curriculum Information File. In this process codes which indicated the pupil activities sponsored by each staff member are replaced with IEIC Course Numbers and Local Course Numbers. (IEIC Pupil Activity Numbers are assigned as IEIC Course Numbers. A "9" followed by the last two digits of the IEIC Pupil Activity Number are used for Local Course Numbers.) A Professional Staff List is printed in Staff Code sequence with one line of information for each staff member.

(ESTABLISHING CURRENT SCHOOL RECORDS - Page 2 of 4)


IEIC
FROM SCHOOLS (STEP 60)
UPDATED PROFESSIONAL STAFF LISTS
75
KEYPUNCH
UPDATED STAFF INFORMATION
FROM SCHOOLS (STEP 60)
PROFESSIONAL STAFF HEADER - #7
FOR EACH STAFF MEMBER
FOR EACH TEAM-TAUGHT SECTION
FOR EACH STAFF MEMBER WHO IS CAPTAIN OF A TEAM-TAUGHT SECTION
77
SCORE
INFORMATION FROM #7, #13, #15, AND #6 CARDS
FROM STEP 4
1965-66 PROFESSIONAL STAFF
78
SORT
STAFF AND CURRICULUM INFORMATION
76
D. P.
1966-67 PROFESSIONAL STAFF INFORMATION
79
D. P.
PROFESSIONAL STAFF LIST
1966-67 PROFESSIONAL STAFF MASTER FILE
TO STEP 89 (MAILING TO EACH SCHOOL)
TO STEP 80

80. A curriculum work file is produced by extracting, in Staff Code sequence, all section and activity information from the 1966-67 Staff File. Each section record and each activity record includes the Staff Code, Name, and Social Security Number of the assigned staff member. (When there is more than one staff member assigned to one section or one activity, the file contains one record for each staff member with each record containing a "type of teacher" code; i.e., multiple records for the specific section or activity.)

81. The curriculum work tape file is sorted to District Code, School Code, Record Type, Local Course Number and Serial Number sequence to produce the Curriculum Information Tape File II. This file contains section and activity records by Local Course Number, with any multiple records for an individual section or activity grouped together, and includes teacher information from staff files.

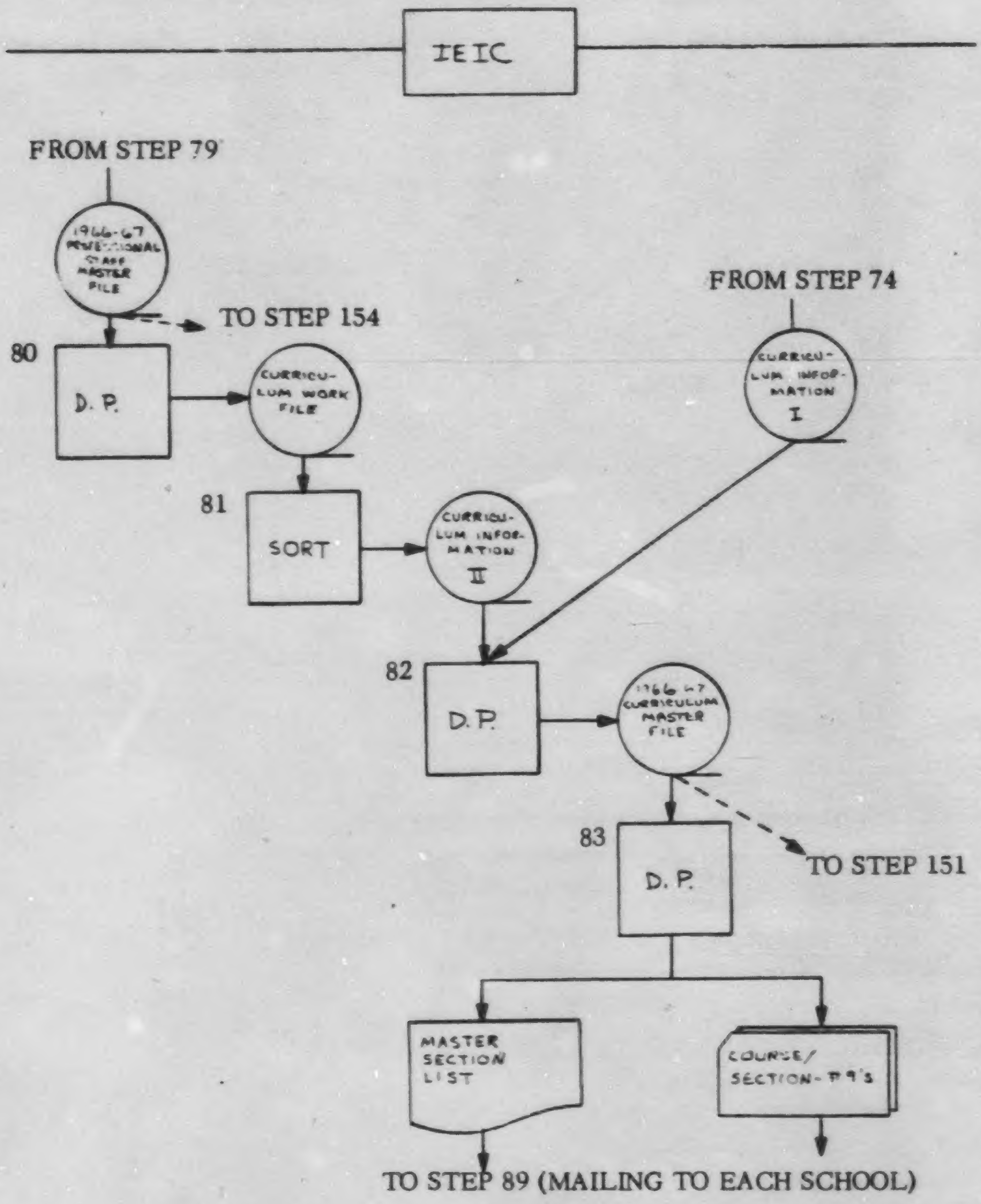
82. The 1966-67 Curriculum Information File I, containing updated course information from spring 1965-66 CardPac and pupil activity information, is processed with the Curriculum Information Tape File II, containing updated staff information from spring 1965-66 CardPac and current "section" information for course and activities. The current Master Curriculum File is produced with one record for each section of a course and with records for each pupil activity to equal the number of staff members who reported the activity. Each record contains the assigned staff member's Staff Code, Name, and Social Security Number. Team taught section records carry only team captain information. In this process Section Numbers are assigned to the course information, and all sections are coded Semester "3" to represent an all-year section. Section numbers are also assigned to pupil activities.

83. The 1966-67 Master Curriculum Tape File is used to produce:

    a. A Master Section List of the 1966-67 curriculum. This lists one line of information for each section of a course and is printed in sequence by Section Number within Local Course Number. Other than Local Course Title and Semester, repetitive information for all sections of a course is printed for the first section only. A "3" for Semester Code, indicating the section meets all year, is printed for all sections, regardless of their actual meeting patterns.

    b. Course/Section Cards #9. One card is produced for each section shown on the Master Section List. In Local Course Number and Section Number sequence, the cards are preidentified with District Code, School Code, Local Course Number, Section Number, Course Title (Local Title when on file, otherwise IEIC Title), code "3" for Semester, Staff Name and Staff Code (the name and code of the team captain when section is team taught).

(ESTABLISHING CURRENT SCHOOL RECORDS - Page 3 of 4)


IEIC
FROM STEP 79
1966-67 PROFESSIONAL STAFF MASTER FILE
TO STEP 154
80
D. P.
CURRICULUM WORK FILE
FROM STEP 74
CURRICULUM INFORMATION I
81
SORT
CURRICULUM INFORMATION II
82
D.P.
1966-67 CURRICULUM MASTER FILE
83
D. P.
TO STEP 151
MASTER SECTION LIST
COURSE/ SECTION-#'s
TO STEP 89 (MAILING TO EACH SCHOOL)

84. The Pupil Stencil Cards #1 for transfers and dropouts from the school since the close of the 1965-66 school year, and the Pupil Information Cards #2 for new pupils for whom there was no CardPac record and for pupils with information changes to be made in CardPac records are "scored" to create a tape file record of the data reported on these cards.

85. Information on the tape created in Step 84 is sorted to create a work file of the same information in District Code, School Code, and Pupil Number sequence.

86. The 1965-66 Pupil File created from spring 1965-66 CardPac data is processed with the file of up-to-date pupil information to be used in updating CardPac pupil records. In this process a current 1966-67 Pupil File is created in District Code, School Code, and Pupil Number sequence.

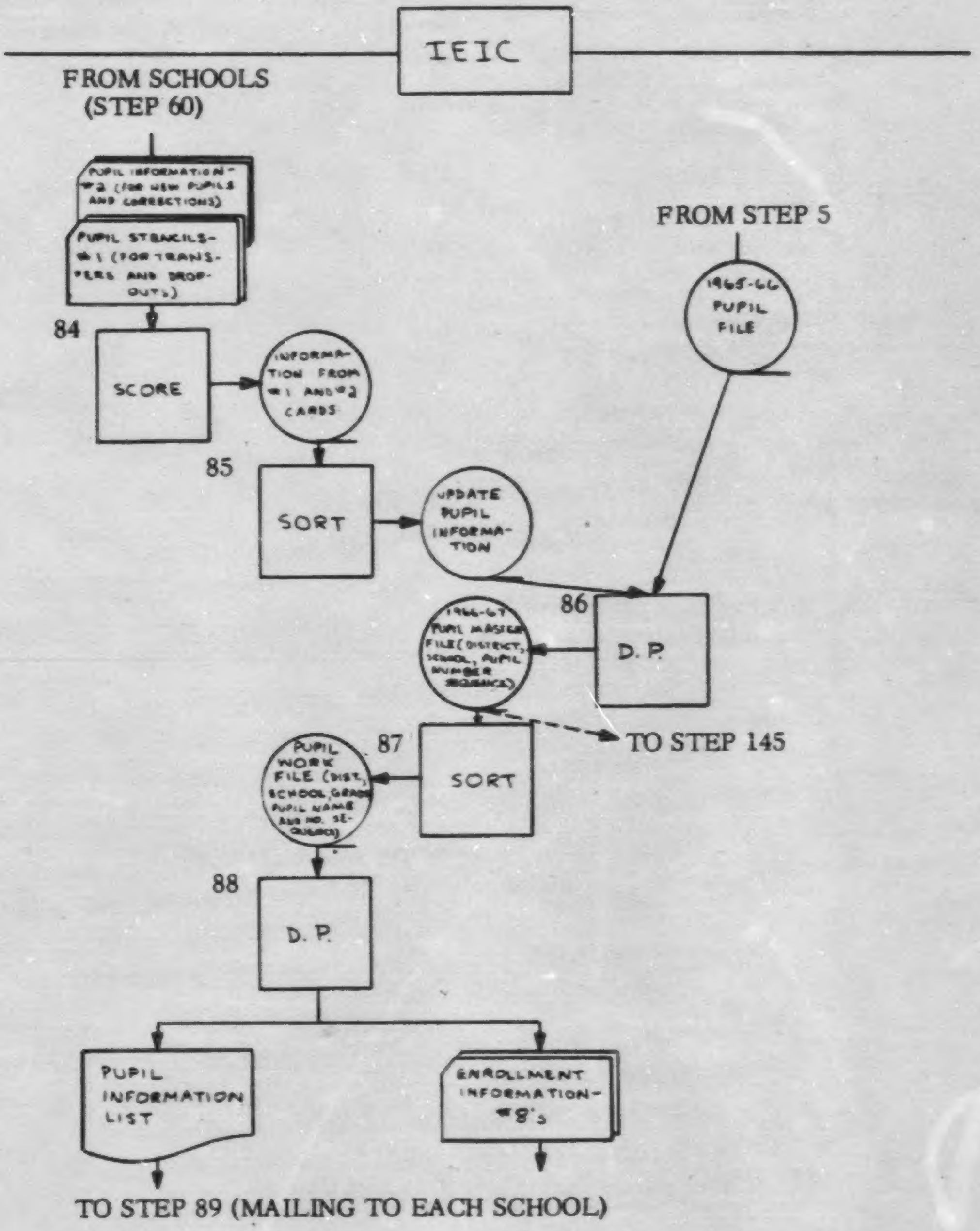
87. The newly created 1966-67 Pupil File is sorted to produce a work file of the same information in District Code, School Code, Grade, Pupil Name (alphabetical), and Pupil Number sequence.

88. The pupil work file from step 87 is used to produce:

    a. A Pupil Information List of the 1966-67 enrollment. This lists one line of information for each pupil and is printed for each school in grade, pupil name (alphabetical), and pupil number sequence.

    b. Enrollment Information Cards #8. One card is produced for each pupil shown on the Pupil Information List and is preidentified with Pupil Number, District Code, School Code, Pupil Name, Sex, Grade, Type of Entry Code and Educational Classification. Day of School (entered) is punched in each card but is not printed on it. For each school, the cards are in grade, pupil name (alphabetical), and pupil number sequence.

(ESTABLISHING CURRENT SCHOOL RECORDS - Page 4 of 4)


IEIC
FROM SCHOOLS (STEP 60)
PUPIL INFORMATION-#2 (FOR NEW PUPILS AND CORRECTIONS)
PUPIL STENCILS-#1 (FOR TRANSFERS AND DROP-OUTS)
84
SCORE
INFORMATION FROM #1 AND #2 CARDS
85
SORT
UPDATE PUPIL INFORMATION
FROM STEP 5
1965-66 PUPIL FILE
86
D. P.
1966-67 PUPIL MASTER FILE (DISTRICT, SCHOOL, PUPIL NUMBER SEQUENCE)
TO STEP 145
87
SORT
PUPIL WORK FILE (DIST., SCHOOL, GRADE, PUPIL NAME AND NO. SEQUENCE)
88
D. P.
PUPIL INFORMATION LIST
ENROLLMENT INFORMATION-#8's
TO STEP 89 (MAILING TO EACH SCHOOL)

89. Items to be sent to each school by October 15 include:

Preidentified cards and prepared lists:

a. Professional Staff List
b. Course/Section Cards #9 and matching Master Section List
c. Enrollment Information Cards #8
d. Pupil Information List

Blank cards from stock:

a. Course/Section Card #9 with red stripe (10% of the reported total number of sections this school year)
b. Enrollment Information Cards #8 (5% of pupil population)
c. Pupil Course Cards #5 (quantity sent to each school is based on the type of school and the enrollment*, and is determined as follows:
Senior High Schools: a quantity to equal 8 cards per pupil.
Combined Junior-Senior High Schools: a quantity to equal 10 cards per pupil.
Junior High Schools: a quantity to equal 12 cards per pupil.)

Instructions:

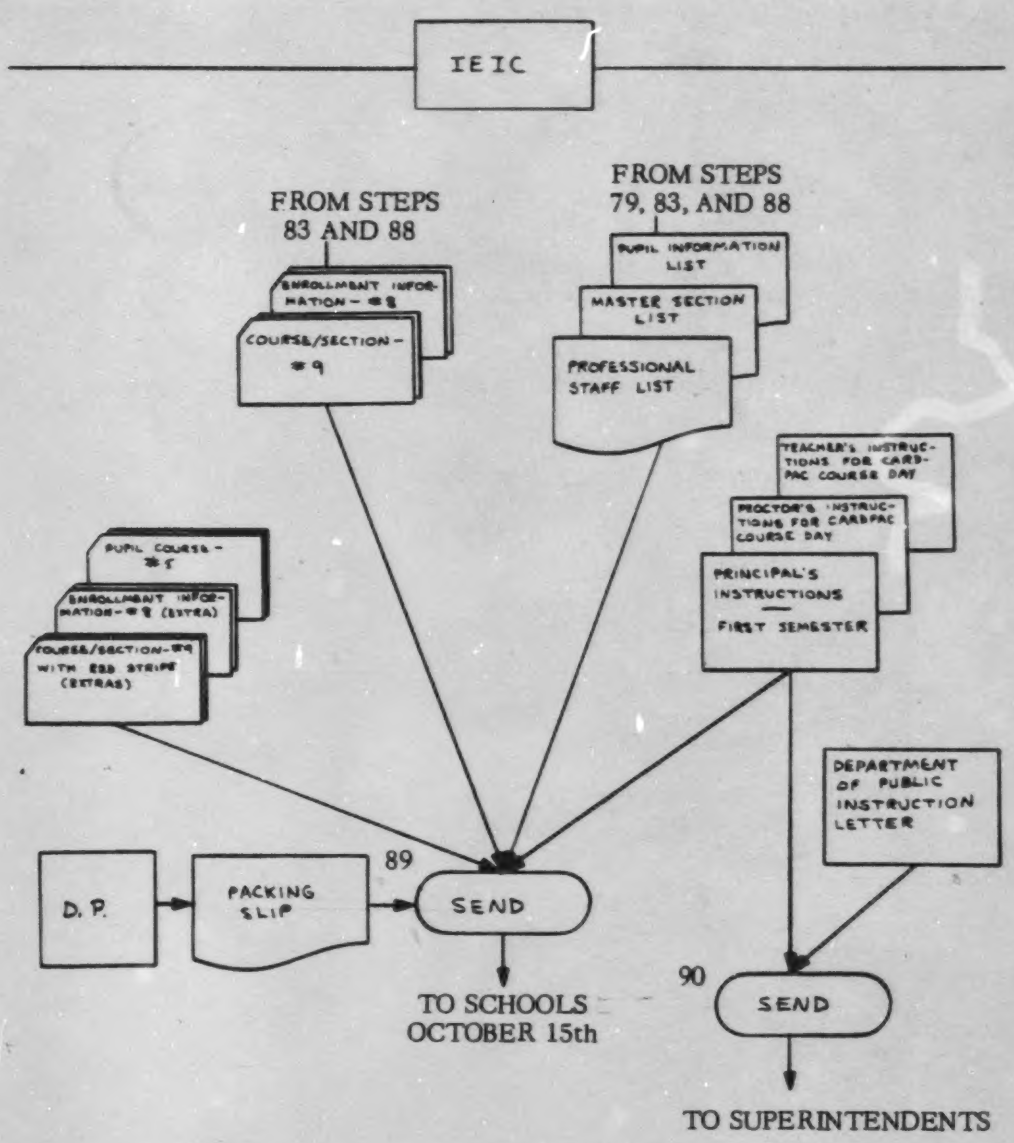
a. Principal's Instructions (1 per school)
b. Proctor's Instructions for "CardPac Course Day" (5% of pupil population, minimum of 10)
c. Teacher's Instructions for CardPac Course Day (5% of pupil population, minimum of 10)

Packing Slip

90. One copy each of the Principal's Instructions, Proctor's Instructions, and Teacher's Instructions are enclosed with a letter from the State Department of Public Instruction and sent to the district and county superintendents.

* As reported on the School Header Card by each school in Step 58.

(SECOND SHIPMENT TO SCHOOLS)


IEIC
FROM STEPS 83 AND 88
ENROLLMENT INFORMATION - #8
COURSE/SECTION - #9
FROM STEPS 79, 83, AND 88
PUPIL INFORMATION LIST
MASTER SECTION LIST
PROFESSIONAL STAFF LIST
TEACHER'S INSTRUCTIONS FOR CARDPAC COURSE DAY
PROCTOR'S INSTRUCTIONS FOR CARDPAC COURSE DAY
PRINCIPAL'S INSTRUCTIONS — FIRST SEMESTER
PUPIL COURSE - #5
ENROLLMENT INFORMATION - #8 (EXTRA)
COURSE/SECTION - #9 WITH RED STRIPE (EXTRAS)
DEPARTMENT OF PUBLIC INSTRUCTION LETTER
D. P.
PACKING SLIP
89
SEND
TO SCHOOLS OCTOBER 15th
90
SEND
TO SUPERINTENDENTS

PHASE III INPUT AND OUTPUT DOCUMENTS

1. Master Section List
2. Course/Section Card #9
3. Pupil Course Card #5
4. Pupil Information List
5. Enrollment Information Card #8

FIGURE 10

MASTER SECTION LIST FOR-GREEN MOUNTAIN DIST-2682 BLD-109 DATE-11/29/66 PAGE-001

CRS-SEC	TITLE	OTR-SCH	IEIC TITLE	IEIC NO	M/WR	W/YR	LEV	TYP	CR	REQ	VOC	U/V	SEM	STAFF NAME	STAFF CODE
101-01	ENGLISH 9		ENGLISH 9	1340	0285	36	1	1	1	1	0	100	3	MILLER CLARE	005
102-01	ENGLISH 10		ENGLISH 10	1341	0250	36	1	1	1	1	0	100	3	MILLER CLARE	005
103-01	ENGLISH 11		ENGLISH 11	1342	0250	36	1	1	1	1	0	100	3	MILLER CLARE	005
104-01	ENGLISH 12		ENGLISH 12	1343	0250	36	1	1	1	0	0	100	3	MILLER CLARE	005
105-01	SPEECH I		SPEECH I	1740	0285	36	1	1	1	0	0	100	3	MILLER CLARE	005
106-01	ART I		ART I	2140	0285	36	1	1	1	0	0	100	3	KAMPA JUDY	002
107-01	ART II		ART II	2141	0250	36	1	1	1	0	0	100	3	KAMPA JUDY	002
108-01	MIXED CHORUS		MIXED CHORUS	2240	0100	36	1	1	1	0	0	025	3	KEHRBERG ERROL W	013
109-01	SENIOR BAND		BAND	2242	0100	36	1	1	1	0	0	025	3	KEHRBERG ERROL W	013
110-01	SPANISH I		SPANISH I	3540	0285	36	1	1	1	0	0	100	3	RANKIN EDITH	004
111-01	SPANISH II		SPANISH II	3541	0285	36	1	1	1	0	0	100	3	RANKIN EDITH	004
112-01	ALGEBRA I		ALGEBRA I	4140	0285	36	1	1	1	0	0	100	3	HESSENIUS RI	007
113-01	ALGEBRA II		ALGEBRA II	4141	0250	36	1	1	1	0	0	100	3	HESSENIUS RI	007
114-01	FUSED GEOM.		FUSED GEOMET	4542	0250	36	1	1	1	0	0	100	3	HESSENIUS RI	007
115-01	MATH IV		SR TOP MATH.	4740	0250	36	1	1	1	0	0	100	3	HESSENIUS RI	007
116-01	BOYS PE,9-12		BOYS' P.E.	5240	0100	36	1	1	1	1	0	025	3	SCHULTZ EDWARD L	012
117-01	GIRL PE,9-12		GIRLS' P.E.	5340	0100	36	1	1	1	1	0	025	3	SCHULTZ EDWARD L	012
118-01	BIOLOGY I		BIOLOGY I	6140	0285	36	1	1	1	0	0	100	3	KUEHL RICHAR	011

FIGURE 11

COURSE/SECTION CARD #9

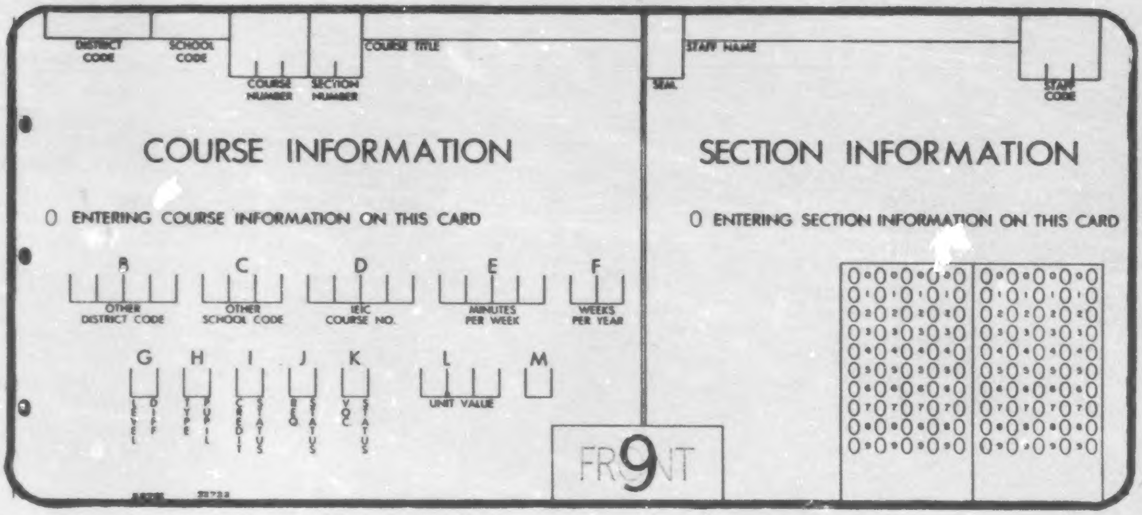

DISTRICT CODE
SCHOOL CODE
COURSE NUMBER
SECTION NUMBER
COURSE TITLE
SEM.
STAFF NAME
STAFF CODE
COURSE INFORMATION
0 ENTERING COURSE INFORMATION ON THIS CARD
B
OTHER DISTRICT CODE
C
OTHER SCHOOL CODE
D
IEIC COURSE NO.
E
MINUTES PER WEEK
F
WEEKS PER YEAR
G
LEVEL
DIFF
H
TYPE
PUPIL
I
CREDIT
STATUS
J
REQ
STATUS
K
VOC
STATUS
L
UNIT VALUE
M
SECTION INFORMATION
0 ENTERING SECTION INFORMATION ON THIS CARD
FRONT
9

FIGURE 12

PUPIL COURSE CARD #5

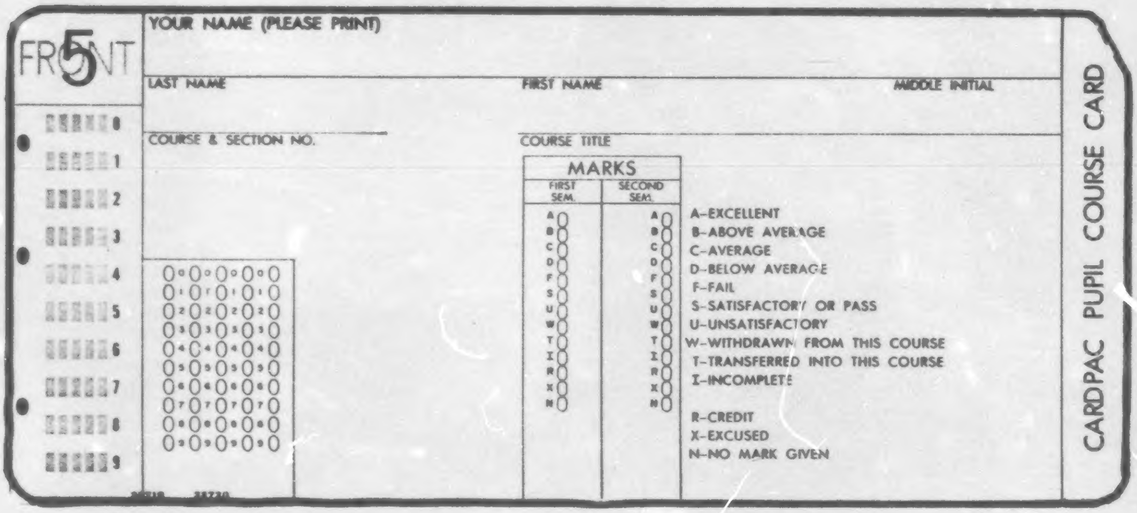

FRONT
5
YOUR NAME (PLEASE PRINT)
LAST NAME
FIRST NAME
MIDDLE INITIAL
COURSE & SECTION NO.
COURSE TITLE
MARKS
FIRST SEM.
SECOND SEM.
A-EXCELLENT
B-ABOVE AVERAGE
C-AVERAGE
D-BELOW AVERAGE
F-FAIL
S-SATISFACTORY OR PASS
U-UNSATISFACTORY
W-WITHDRAWN FROM THIS COURSE
T-TRANSFERRED INTO THIS COURSE
I-INCOMPLETE
R-CREDIT
X-EXCUSED
N-NO MARK GIVEN
CARDPAC PUPIL COURSE CARD

FIGURE 13

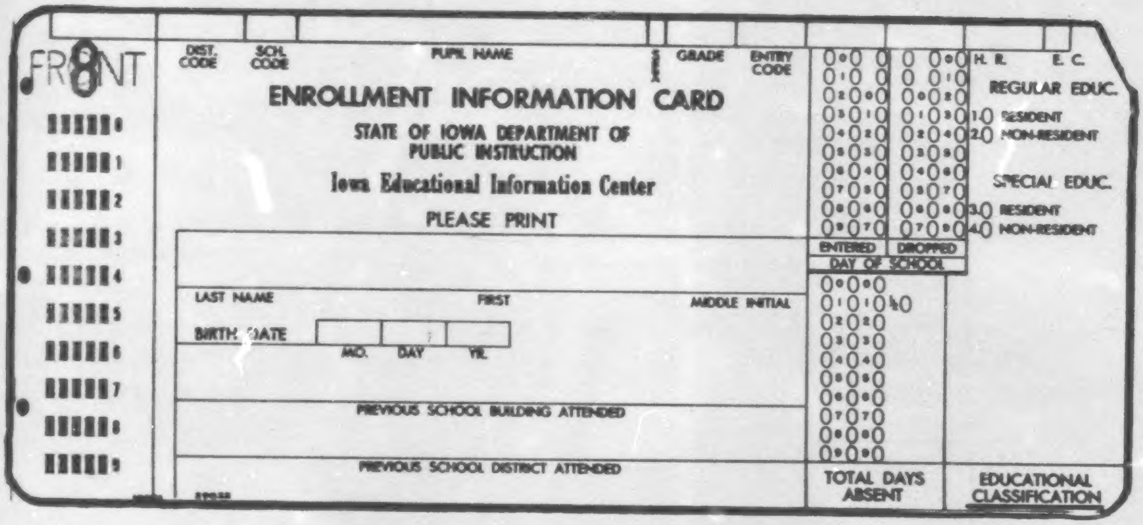
PUPIL INFORMATION LIST FOR-STRATFORD HIGH SCHOOL DIST-6246 BLD-109 DATE - 04/15/67

PUPIL NAME	ID	GRADE	SEX	BIRTHDATE	FATH. OCC.	MOTH. OCC.	ED. CLS.	ORG. ENTR.	RE-ENTR.
HARTLEY LINDA L	00248	10	G	07/20/50	A2	A3	1	E1A	
HUDSON CAROLYN L	00249	10	G	08/30/51	A5	C2	1	E1A	
JOHNSON KAREN BETH	00250	10	G	03/28/50	A2	A3	1	E1A	
JOHNSON KAREN K	00246	10	G	05/23/51	A2	A3	1	E1A	
KELLEY VICKIE L	00251	10	G	10/22/51	A2	A3	1	E1A	
LARSON DANIEL E	00252	10	B	03/11/51	A2	A3	1	E1A	
LEE SUSAN M	00253	10	G	03/26/51	B1	A3	1	E1A	
PATTERSON ROGER L	00255	10	B	09/10/51	A2	A3	1	E1A	
PURDY DALE P	00256	10	B	03/21/51	A2	B1	1	E1A	
SWEHORN JAMES A	00257	10	B	04/16/51	B1	A3	1	E1A	
SMITH VICTORIA L	00258	10	G	02/27/51	A2	A3	1	E1A	
STARK JANELL I	00259	10	G	05/30/51	A2	A3	1	E1A	
STARK VICKI L	00260	10	G	01/04/51	A2	A3	1	E1A	
SWEDLUND NEIL K	00261	10	B	09/03/51	C1	A3	1	E1A	
WIRTZ ROBERT L	00265	10	B	06/08/51	A2	A3	1	E1A	
ANGLE MARLA A	00262	11	G	07/19/50	C1	C1	1	E1A	
CHAPPELL RONALD E	00264	11	B	11/27/49	A2	A4	1	E1A	
COULTER KATHRYN E	00266	11	G	08/09/50	C1	A3	1	E1A	
FARO FRANK L	00242	11	B	09/14/49	A5	A3	1	E1A	
FISHER DEBI L	00267	11	G	06/22/50	B2	A3	1	E1A	
HAGLUND KENNETH D	00268	11	B	04/03/49	A2	A3	1	E1A	
HUDSON FRANK E	00269	11	B	07/15/50	A5	C2	1	E1A	
ILES DIANA M	00270	11	G	07/23/50	B2	A4	1	E1A	
JOHNSON ELAINE I	00271	11	G	07/27/50	C1	A3	1	E1A	
JOHNSON MARLEEN M	00272	11	G	09/26/50	A2	A3	1	E1A	
JOHNSON STEPHEN G	00273	11	B	12/04/49	A2	A3	1	E1A	
JOHNSON VICKI A	00274	11	G	10/04/49	A2	A4	1	E1A	
KANE CYNTHIA R	00275	11	G	09/11/50	A2	A3	1	E1A	
LONG CHERYL C	00254	11	G	11/03/49	C1	A3	1	E1A	
LUNDBERG MYRON D	00277	11	B	08/04/50	B2	A1	1	E1A	
PATTERSON BETHENE K	00278	11	G	10/06/50	A2	A3	1	E1A	
PETERSON CINDY S	00279	11	G	07/07/50	C1	A3	1	E1A	
POWELL SHANNAN K	00280	11	G	06/28/50	B4	A3	1	E1A	
SACKRISON JOHN A	00282	11	B	01/13/50	A2	A3	1	E1A	
SHAFER KEVIN W	00283	11	B	11/15/49	B2	C2	1	E1A	
STONE JANET M	00284	11	G	01/20/50	C2	C2	1	E1A	
WALLER ANNETTE E	00285	11	G	06/14/50	A2	A4	1	E1A	
WARD LINDA M	00286	11	G	09/21/49	A2	A3	1	E1A	
WARD TOMMIE L	00287	11	B	01/28/50	A2	A3	1	E1A	
WESTRUM NORINE L	00288	11	G	04/13/50	A2	A3	1	E1A	
ANDERSON EDWIN R	00289	12	B	01/26/49	A2	A1	1	E1A	
ANDERSON STEPHEN O	00290	12	B	09/03/49	C1	C2	1	E1A	
ANGSTROM OWEN B	00291	12	B	04/02/49	A2	A3	1	E1A	
BENNETT SHERRY KAY	00292	12	G	05/18/49	A2	A3	1	E1A	
BERGLUND DAVID A	00293	12	B	02/27/49	A5	A3	1	E1A	

FIGURE 14

ENROLLMENT INFORMATION CARD #8

(Front)



FR8NT

DIST. CODE

SCH. CODE

PUPIL NAME

GRADE

ENTRY CODE

ENROLLMENT INFORMATION CARD

STATE OF IOWA DEPARTMENT OF PUBLIC INSTRUCTION

Iowa Educational Information Center

PLEASE PRINT

LAST NAME

FIRST

MIDDLE INITIAL

BIRTH DATE

MO.

DAY

YR.

PREVIOUS SCHOOL BUILDING ATTENDED

PREVIOUS SCHOOL DISTRICT ATTENDED

ENTERED

DROPPED

DAY OF SCHOOL

TOTAL DAYS ABSENT

H. R.

E. C.

REGULAR EDUC.

1 ○ RESIDENT

2 ○ NON-RESIDENT

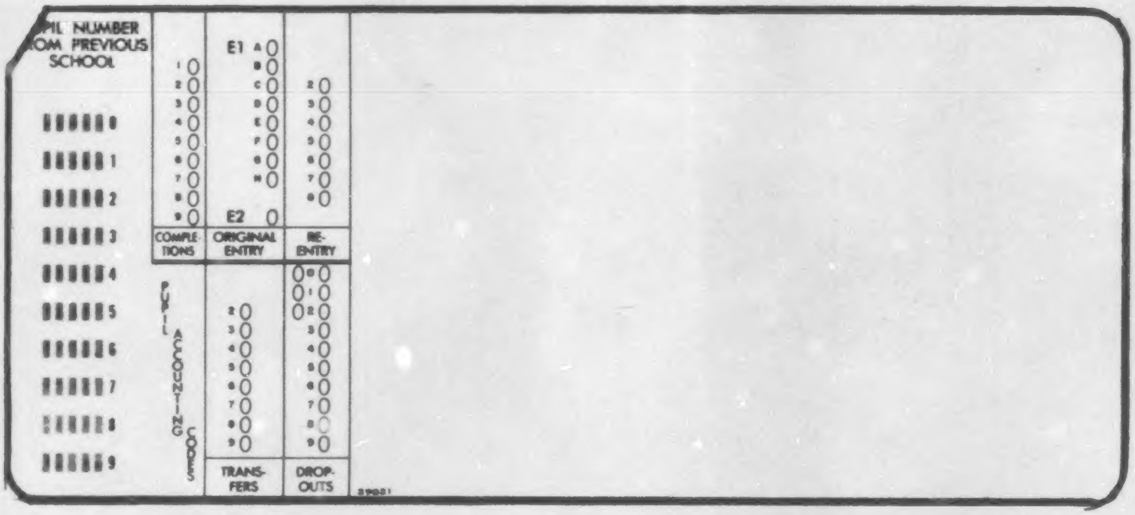
SPECIAL EDUC.

3 ○ RESIDENT

4 ○ NON-RESIDENT

EDUCATIONAL CLASSIFICATION

(Back)



PIL NUMBER

OM PREVIOUS

SCHOOL

COMPLETIONS

E1

ORIGINAL ENTRY

E2

RE-ENTRY

PUPIL ACCOUNTING CODES

TRANSFERS

DROP-OUTS

PHASE IV

STEPS 91-95: SCHOOL MAINTENANCE FILE PROCEDURE

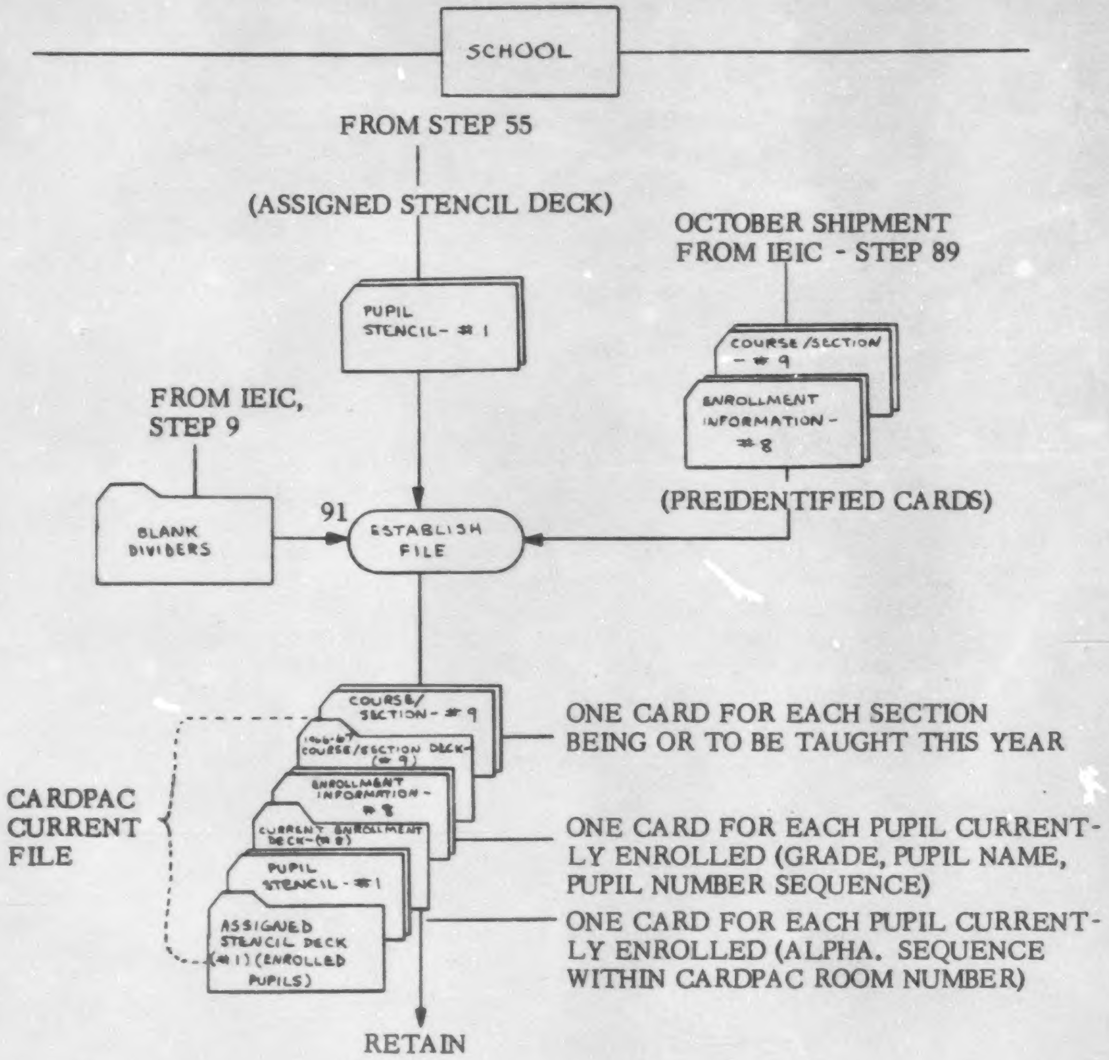
91. When the preidentified cards are received from IEIC in October a CardPac Current File is established. The file is to reflect current enrollment and current curriculum. The cards are filed in the following order with an identifying divider card preceding each type:

a. The Assigned Stencil Deck from Step 55. The deck is to contain one Pupil Stencil Card #1 for each pupil currently enrolled. (Steps 93a and 93b correct this deck when changes have occurred since Step 17, at which time #1 cards for transfers and dropouts were removed, and Step 20, at which time #1 cards were assigned to pupils with no CardPac record.)

b. The preidentified Enrollment Information Cards #8 received from IEIC in Step 89. The deck is to contain one card for each pupil currently enrolled. (Steps 93a, 93b, 93c, and 93d correct this deck when changes have occurred since Step 16, at which time educational classification corrections were recorded on Pupil Information Cards #2, since Steps 17 and 19, at which time Pupil Stencil Cards #1, for transfers and dropouts were identified, and since Step 20, at which time enrollment information was recorded on #2 cards for pupils with no CardPac record. These #1 and #2 cards were sent to IEIC in Step 57 and were used by IEIC to update enrollment records before preparing the preidentified Enrollment Information Cards #8.)

c. The preidentified Course/Section Cards #9 received from IEIC in Step 89. The deck is to contain one card for each section being taught or to be taught this school year. (Step 93 corrects this deck when changes have occurred since Step 44, at which point current-year sections had been identified by Section Cards #6. These #6 cards, as sent to IEIC in Step 57, were used to prepare the preidentified Course/Section Cards #9.)

(ESTABLISHING THE CARDPAC CURRENT FILE)


SCHOOL
FROM STEP 55
(ASSIGNED STENCIL DECK)
PUPIL STENCIL - #1
OCTOBER SHIPMENT FROM IEIC - STEP 89
COURSE/SECTION - #9
ENROLLMENT INFORMATION - #8
(PREIDENTIFIED CARDS)
FROM IEIC, STEP 9
BLANK DIVIDERS
91
ESTABLISH FILE
COURSE/ SECTION - #9
1966-67 COURSE/SECTION DECK- (#9)
ENROLLMENT INFORMATION - #8
CURRENT ENROLLMENT DECK-(#8)
PUPIL STENCIL - #1
ASSIGNED STENCIL DECK (#1) (ENROLLED PUPILS)
CARDPAC CURRENT FILE
ONE CARD FOR EACH SECTION BEING OR TO BE TAUGHT THIS YEAR
ONE CARD FOR EACH PUPIL CURRENTLY ENROLLED (GRADE, PUPIL NAME, PUPIL NUMBER SEQUENCE)
ONE CARD FOR EACH PUPIL CURRENTLY ENROLLED (ALPHA. SEQUENCE WITHIN CARDPAC ROOM NUMBER)
RETAIN

(THE PROCEDURES OUTLINED IN STEPS 92 AND 93 ARE FOLLOWED TO MAINTAIN THE FILE AS A CURRENT RECORD.)

(CHANGES IN EXISTING PUPIL INFORMATION ARE MADE AS OUTLINED IN STEP 94.)

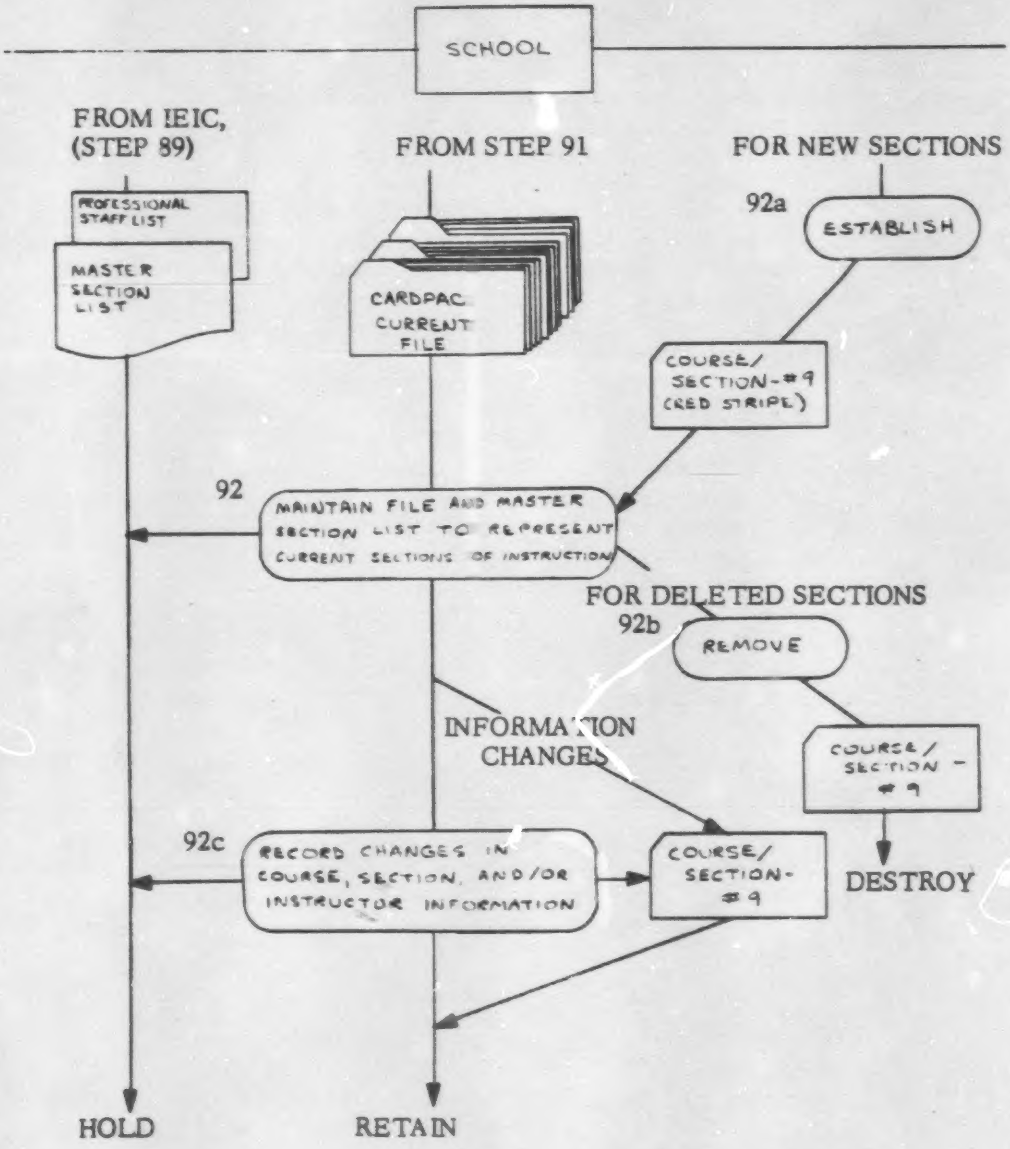
92. This step occurs when curriculum changes during the school year affect CardPac information. Such changes may include:

a. New sections (Additional sections of courses shown on the Master Section List or sections of new courses.) Section information is entered on the Master Section List. A blank red-striped Course/Section Card #9 is appropriately completed for each additional section and placed in the CardPac Current File.

b. Deleted Sections. Section information is crossed off Master Section List. The Course/Section Card #9 is removed from the CardPac Current File and destroyed.

c. Section information changes pertinent to CardPac. The course, section, and/or teacher information change is recorded on the Master Section List. The same information is recorded on the Course/Section Card #9 which is removed from and returned to the CardPac Current File. (Teacher information changes are also recorded on the Professional Staff List. When the change is the result of an addition to the professional staff, a staff code is assigned by using the next consecutive number that would follow the highest number shown on the Professional Staff List. Name, Social Security Number, and Staff Code are added to the list. Changes or corrections in a staff member's name or Social Security number are entered on the list above the information being deleted. When a teacher withdraws from school, a line is drawn through his name and Social Security number on the Professional Staff List.)

(MAINTAINING CURRICULUM RECORDS IN THE CARDPAC CURRENT FILE)


SCHOOL
FROM IEIC, (STEP 89)
FROM STEP 91
FOR NEW SECTIONS
92a
ESTABLISH
PROFESSIONAL STAFF LIST
MASTER SECTION LIST
CARDPAC CURRENT FILE
COURSE/ SECTION-#9 (RED STRIPE)
92
MAINTAIN FILE AND MASTER SECTION LIST TO REPRESENT CURRENT SECTIONS OF INSTRUCTION
FOR DELETED SECTIONS
92b
REMOVE
INFORMATION CHANGES
COURSE/ SECTION - #9
92c
RECORD CHANGES IN COURSE, SECTION, AND/OR INSTRUCTOR INFORMATION
COURSE/ SECTION- #9
DESTROY
HOLD
RETAIN

93. This step occurs throughout the school year when there are enrollment changes. This may include:

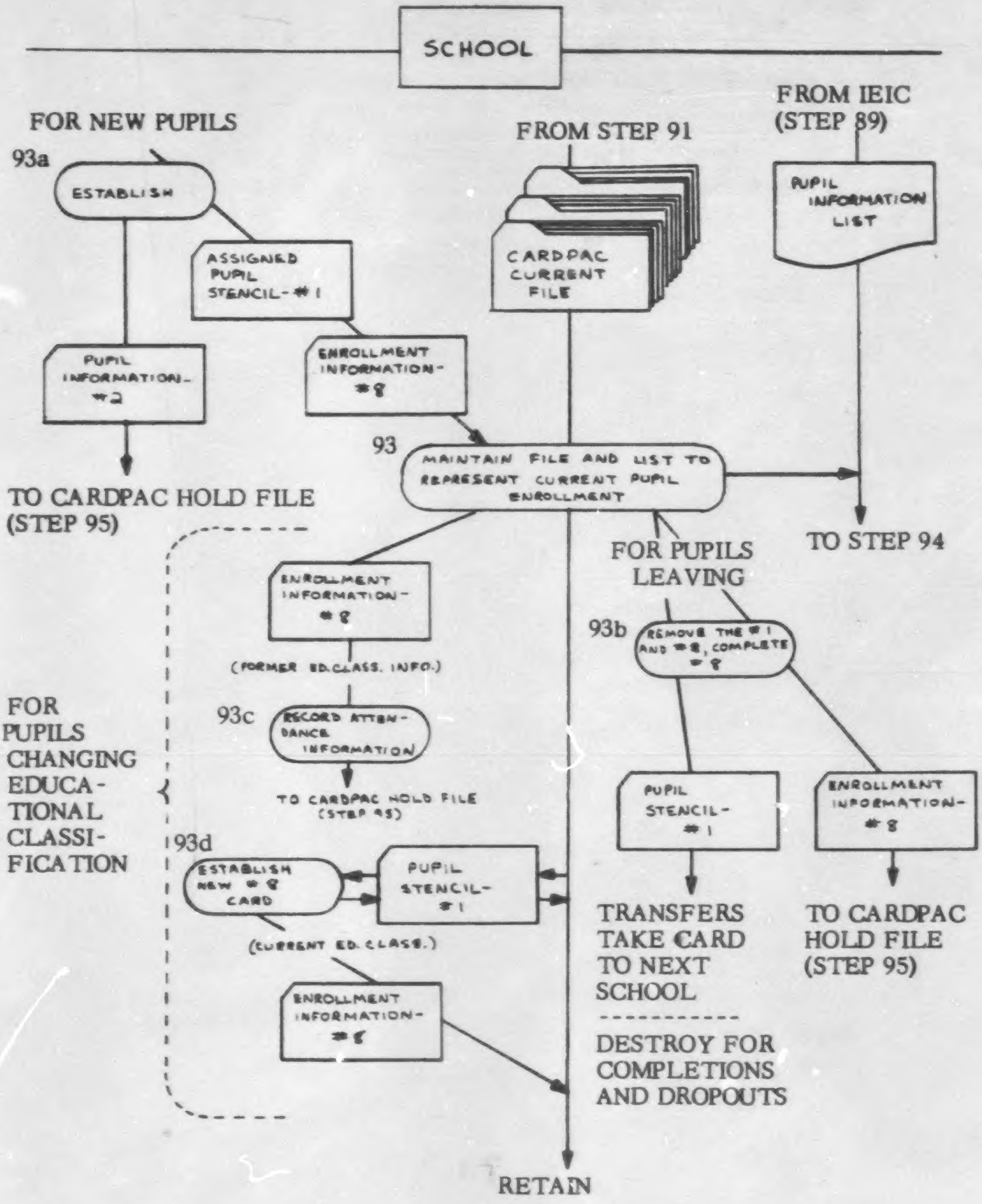
a. New pupils. Each pupil is assigned a prepunched Pupil Stencil Card #1 (from Step 20). On the #1 card he prints district code, school code, pupil name, grade, and CardPac room (homeroom) number. He stencils his pupil number on a blank Pupil Information Card #2 and a blank Enrollment Information Card #8. The pupil prints his name and grids father's occupation, mother's occupation, birthdate, grade, sex, and pupil name on the #2 card. District code, school code, pupil name (in two places) sex, grade, entry code, day of school entered, CardPac room (homeroom) number, educational classification, birthdate, previous school building attended and previous school district are printed and day of school entered, educational classification, and type of entry are gridded on the #8 card. When the CardPac pupil number from the previous school attended is known, it is gridded on the #8 card.

b. Pupils withdrawing from school. Each pupil's Pupil Stencil Card #1 and Enrollment Information Card #8 are removed from the CardPac Current File. Day of school dropped, total days absent, and withdrawal reason (by use of the appropriate completion, transfer or dropout code) are gridded on the #8 card. Information is entered on the Pupil Information List. The #8 card is placed in the CardPac Hold File (See Step 95). The #1 card is given to the transfer pupil for delivery to his new school. The #1 cards for pupils who have completed school or are dropping out of school are destroyed.

c. Pupils changing educational classification; "closing" the former classification. Each pupil's Enrollment Information Card #8 is removed from the CardPac Current File. After gridding day of school dropped (from this classification), total days absent (while enrolled under this classification) and transfer code "6" on this card, it is placed in the CardPac Hold File (see Step 95).

d. Pupils changing educational classification; establishing the current classification. Each pupil's Pupil Stencil Card #1 is used to stencil his pupil number on a blank Enrollment Information Card #8. After gridding the new educational classification, day of school entered (this classification), and re-entry code "8" on this card and entering the data on the Pupil Information List, the card is filed alphabetically within grade in the Current Enrollment Deck of the CardPac Current File.

(MAINTAINING PUPIL RECORDS IN THE CARDPAC CURRENT FILE)

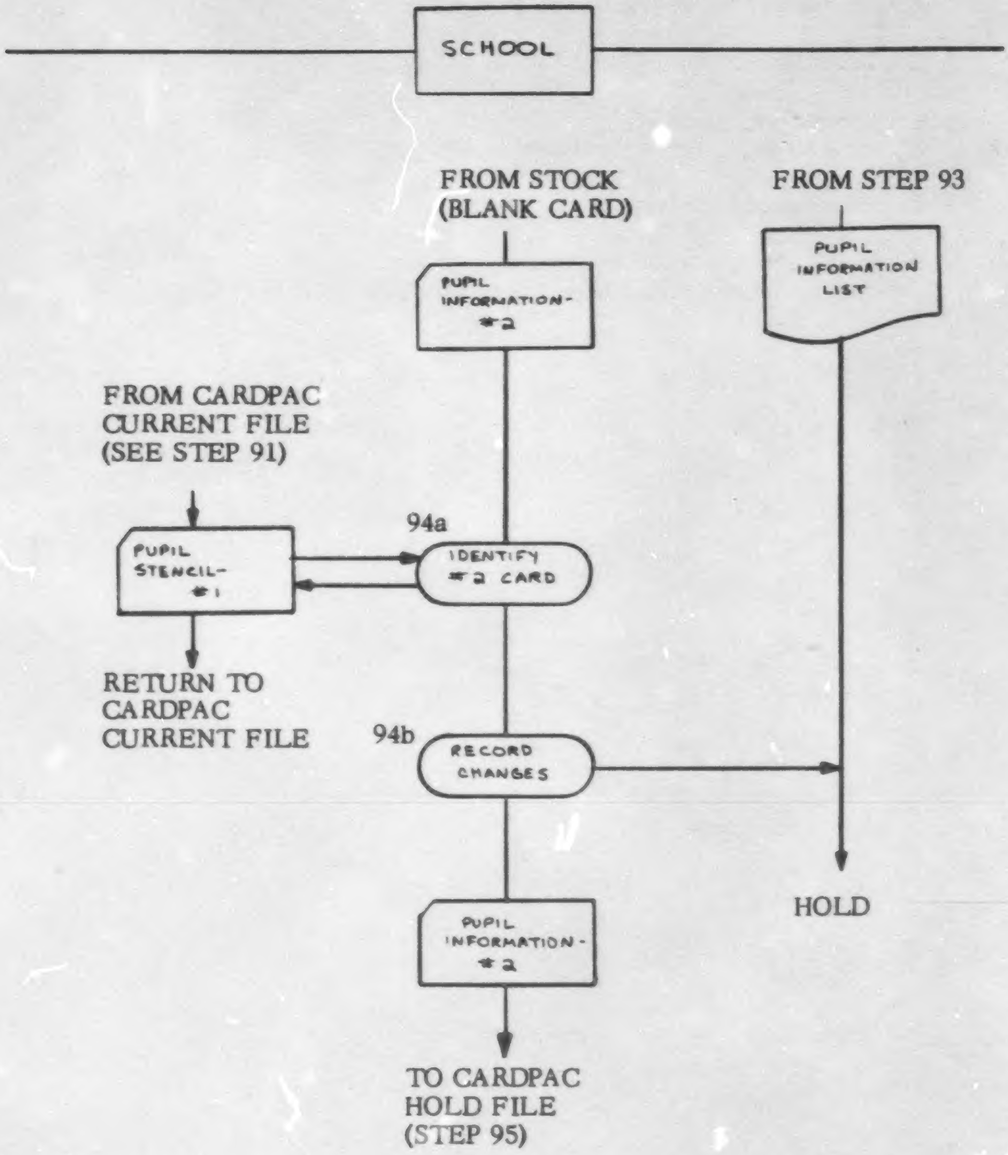

SCHOOL
FOR NEW PUPILS
93a
ESTABLISH
ASSIGNED PUPIL STENCIL-#1
PUPIL INFORMATION-#2
ENROLLMENT INFORMATION-#8
TO CARDPAC HOLD FILE (STEP 95)
FROM STEP 91
CARDPAC CURRENT FILE
FROM IEIC (STEP 89)
PUPIL INFORMATION LIST
93
MAINTAIN FILE AND LIST TO REPRESENT CURRENT PUPIL ENROLLMENT
TO STEP 94
FOR PUPILS LEAVING
93b
REMOVE THE #1 AND #8, COMPLETE #8
PUPIL STENCIL-#1
ENROLLMENT INFORMATION-#8
TRANSFERS TAKE CARD TO NEXT SCHOOL
DESTROY FOR COMPLETIONS AND DROPOUTS
TO CARDPAC HOLD FILE (STEP 95)
FOR PUPILS CHANGING EDUCATIONAL CLASSIFICATION
ENROLLMENT INFORMATION-#8
(FORMER ED.CLASS. INFO.)
93c
RECORD ATTENDANCE INFORMATION
TO CARDPAC HOLD FILE (STEP 95)
93d
ESTABLISH NEW #8 CARD
PUPIL STENCIL-#1
(CURRENT ED.CLASS.)
ENROLLMENT INFORMATION-#8
RETAIN

94. This step occurs throughout the school year whenever pupil information changes are pertinent to CardPac.

   a. Each pupil's Pupil Stencil Card #1 is used to stencil his pupil number on a blank Pupil Information Card #2.

   b. The corrections are gridded in the appropriate areas on the Pupil Information Card #2 and entered on the Pupil Information List. The #2 card is placed in the CardPac Hold File (see Step 95).

(REPORTING CHANGES IN PUPIL INFORMATION)


SCHOOL
FROM STOCK
(BLANK CARD)
FROM STEP 93
PUPIL
INFORMATION-
#2
PUPIL
INFORMATION
LIST
FROM CARDPAC
CURRENT FILE
(SEE STEP 91)
94a
PUPIL
STENCIL-
#1
IDENTIFY
#2 CARD
RETURN TO
CARDPAC
CURRENT FILE
94b
RECORD
CHANGES
HOLD
PUPIL
INFORMATION-
#2
TO CARDPAC
HOLD FILE
(STEP 95)

95. The CardPac Hold File contains completed cards which are being held for shipment to IEIC at a later date. The cards are grouped by card number with an identifying divider card preceding each group. The file can include:

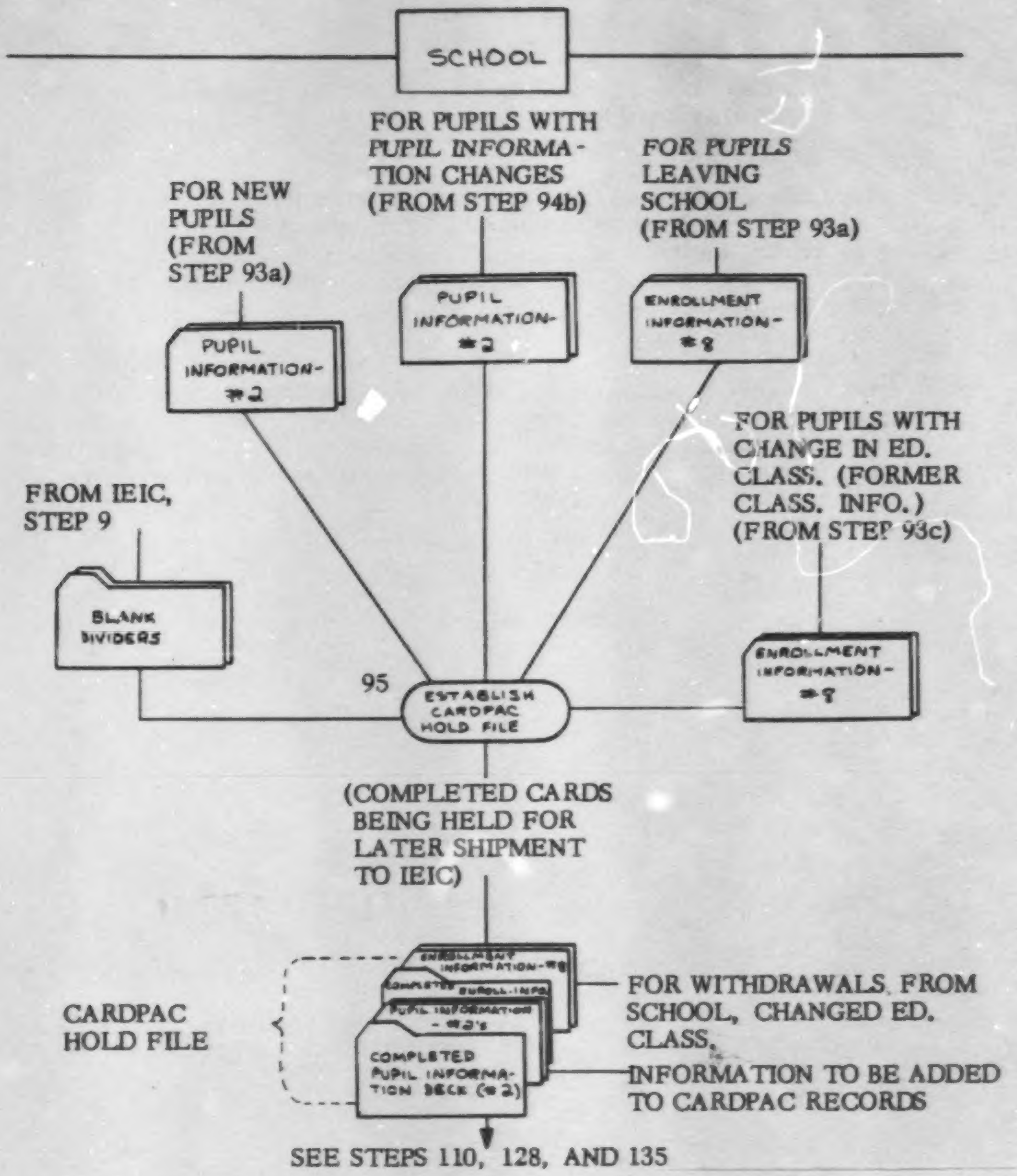
a. Pupil Information Cards #2:

For new pupils
For pupils with information changes

b. Enrollment Information Cards #8:

For pupils who have left this school
For pupils who have changed educational classification.

(ESTABLISHING THE CARDPAC HOLD FILE)


SCHOOL
FOR NEW PUPILS (FROM STEP 93a)
FOR PUPILS WITH PUPIL INFORMATION CHANGES (FROM STEP 94b)
FOR PUPILS LEAVING SCHOOL (FROM STEP 93a)
PUPIL INFORMATION- #2
PUPIL INFORMATION- #2
ENROLLMENT INFORMATION- #8
FOR PUPILS WITH CHANGE IN ED. CLASS. (FORMER CLASS. INFO.) (FROM STEP 93c)
FROM IEIC, STEP 9
BLANK DIVIDERS
95
ESTABLISH CARDPAC HOLD FILE
ENROLLMENT INFORMATION- #8
(COMPLETED CARDS BEING HELD FOR LATER SHIPMENT TO IEIC)
CARDPAC HOLD FILE
ENROLLMENT INFORMATION-#8
COMPLETED ENROLL-INFO
PUPIL INFORMATION - #2's
COMPLETED PUPIL INFORMATION DECK (#2)
FOR WITHDRAWALS, FROM SCHOOL, CHANGED ED. CLASS,
INFORMATION TO BE ADDED TO CARDPAC RECORDS
SEE STEPS 110, 128, AND 135

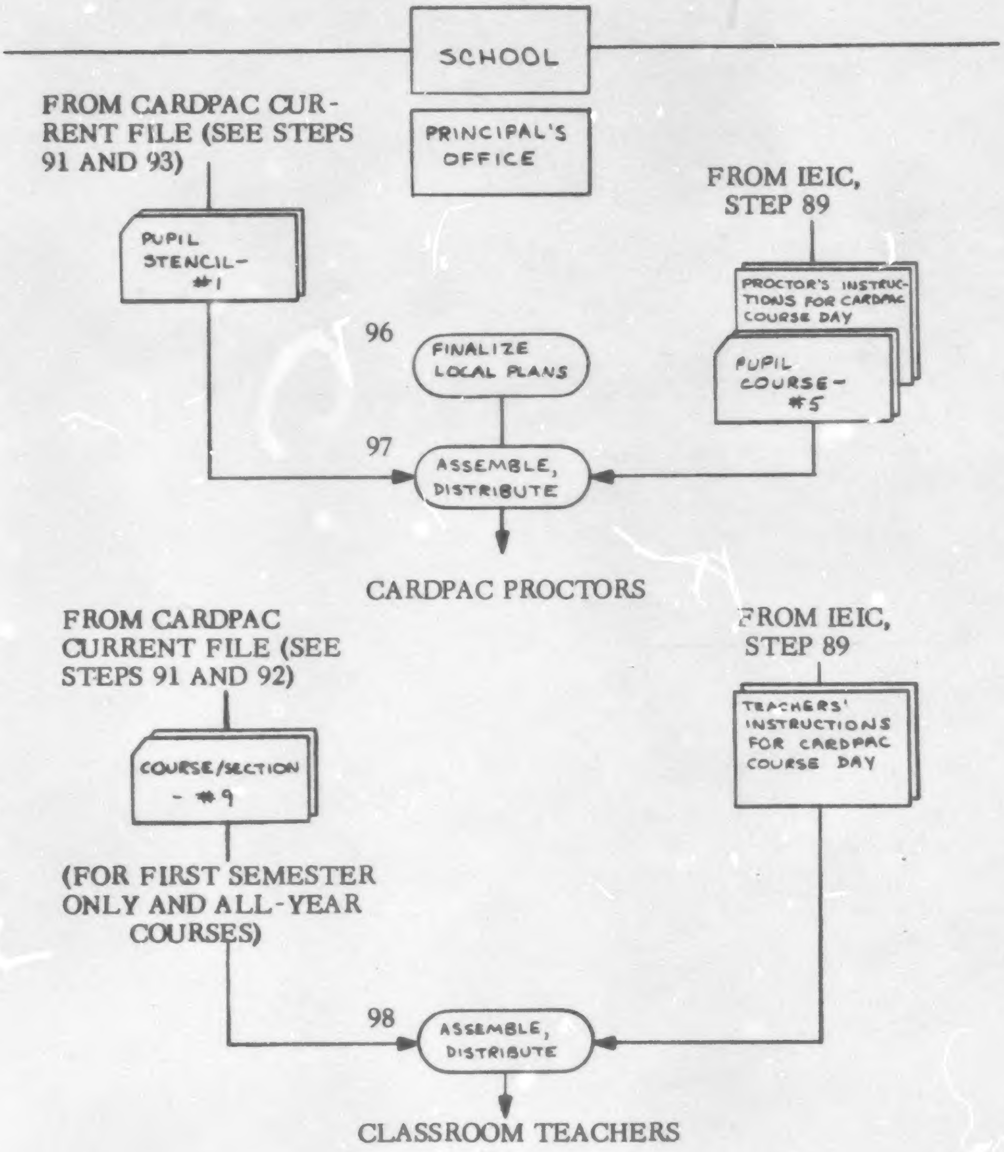
STEPS 96-110: FIRST SEMESTER CARDPAC COURSE DAY AND MARK REPORTING

96. The principal finalizes local plans for a CardPac Course Day to be held before the close of the first semester and determines the makeup procedure for anticipated absentees.

97. Materials are assembled and distributed to CardPac proctors for their review prior to CardPac Course Day. Each proctor receives the Assigned Pupil Stencil Cards #1, for his group, a supply of blank Pupil Course Cards #5, to equal one card for each course in which each pupil in his group is currently enrolled, and a copy of the "Proctor's Instructions for CardPac Course Day."

98. Materials are assembled and distributed to classroom teachers for their review prior to CardPac Course Day. Each teacher receives a pre-identified Course/Section Card #9 for each section he is currently teaching and a copy of the "Teacher's Instructions for CardPac Course Day."

(FIRST SEMESTER CARDPAC COURSE DAY - Page 1 of 3)


SCHOOL
PRINCIPAL'S OFFICE
FROM CARDPAC CURRENT FILE (SEE STEPS 91 AND 93)
PUPIL STENCIL-#1
FROM IEIC, STEP 89
PROCTOR'S INSTRUCTIONS FOR CARDPAC COURSE DAY
PUPIL COURSE-#5
96
FINALIZE LOCAL PLANS
97
ASSEMBLE, DISTRIBUTE
CARDPAC PROCTORS
FROM CARDPAC CURRENT FILE (SEE STEPS 91 AND 92)
COURSE/SECTION - #9
(FOR FIRST SEMESTER ONLY AND ALL-YEAR COURSES)
FROM IEIC, STEP 89
TEACHERS' INSTRUCTIONS FOR CARDPAC COURSE DAY
98
ASSEMBLE, DISTRIBUTE
CLASSROOM TEACHERS

99. The proctor of each CardPac group distributes to each pupil his pre-identified Assigned Pupil Stencil Card, #1, and blank Pupil Course Cards, #5, to equal the number of courses in which the pupil is currently enrolled. (The #1 cards for absent pupils establish a record of pupils to be included in the make-up procedure.)

100. Using one #5 card for each course, each pupil prints his name and course title on each card. With his Pupil Stencil Card #1, he stencils his pupil number on each Pupil Course Card.

101. Pupils return their Pupil Stencil Cards #1 to the CardPac Proctor and take their Pupil Course Cards #5 to the next meeting of each class.

102. The proctor groups together the Pupil Stencil Cards #1 from step 101 in alphabetic sequence and identifies them as "present on CardPac Course Day." The #1 cards for absent pupils are grouped together and identified as "absent on CardPac Course Day." These two groups of cards and any unused Pupil Course Cards, #5, are returned to the principal.

103. The principal assembles the cards received from all CardPac proctors for disposition as follows:

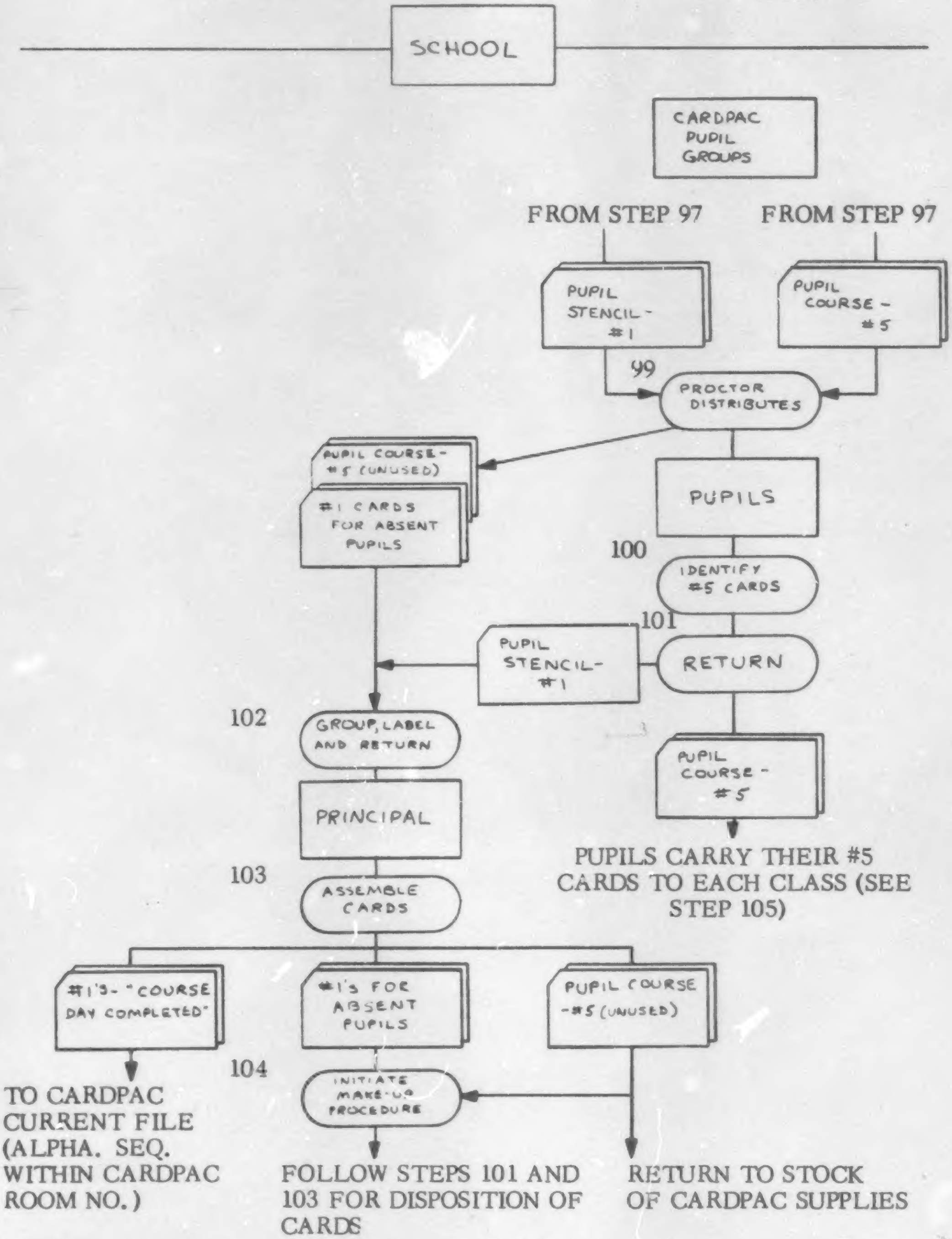
    a. Stencil Cards #1 for pupils who were present are returned to the CardPac Current File.

    b. Stencil Cards #1 for pupils who were absent are held for Step 104.

    c. Unused Pupil Course Cards #5 are returned to the stock of CardPac supplies.

104. The principal initiates the procedure for absent pupils. When completed, the cards from this procedure are disposed of in accord with Steps 101 and 103.

(FIRST SEMESTER CARDPAC COURSE DAY - Page 2 of 3)


SCHOOL
CARDPAC PUPIL GROUPS
FROM STEP 97
FROM STEP 97
PUPIL STENCIL - #1
PUPIL COURSE - #5
99
PROCTOR DISTRIBUTES
PUPIL COURSE - #5 (UNUSED)
#1 CARDS FOR ABSENT PUPILS
PUPILS
100
IDENTIFY #5 CARDS
101
PUPIL STENCIL - #1
RETURN
102
GROUP, LABEL AND RETURN
PUPIL COURSE - #5
PRINCIPAL
PUPILS CARRY THEIR #5 CARDS TO EACH CLASS (SEE STEP 105)
103
ASSEMBLE CARDS
#1'S - "COURSE DAY COMPLETED"
#1'S FOR ABSENT PUPILS
PUPIL COURSE - #5 (UNUSED)
104
INITIATE MAKE-UP PROCEDURE
TO CARDPAC CURRENT FILE (ALPHA. SEQ. WITHIN CARDPAC ROOM NO.)
FOLLOW STEPS 101 AND 103 FOR DISPOSITION OF CARDS
RETURN TO STOCK OF CARDPAC SUPPLIES

105. In each classroom each pupil selects the Pupil Course Card #5 he previously identified for "this" class.

106. The teacher instructs each pupil to print the course number and section number for "this" class on his #5 card. (The teacher uses the course and section numbers shown on the Course/Section Card #9 he will use to represent "this" section.)

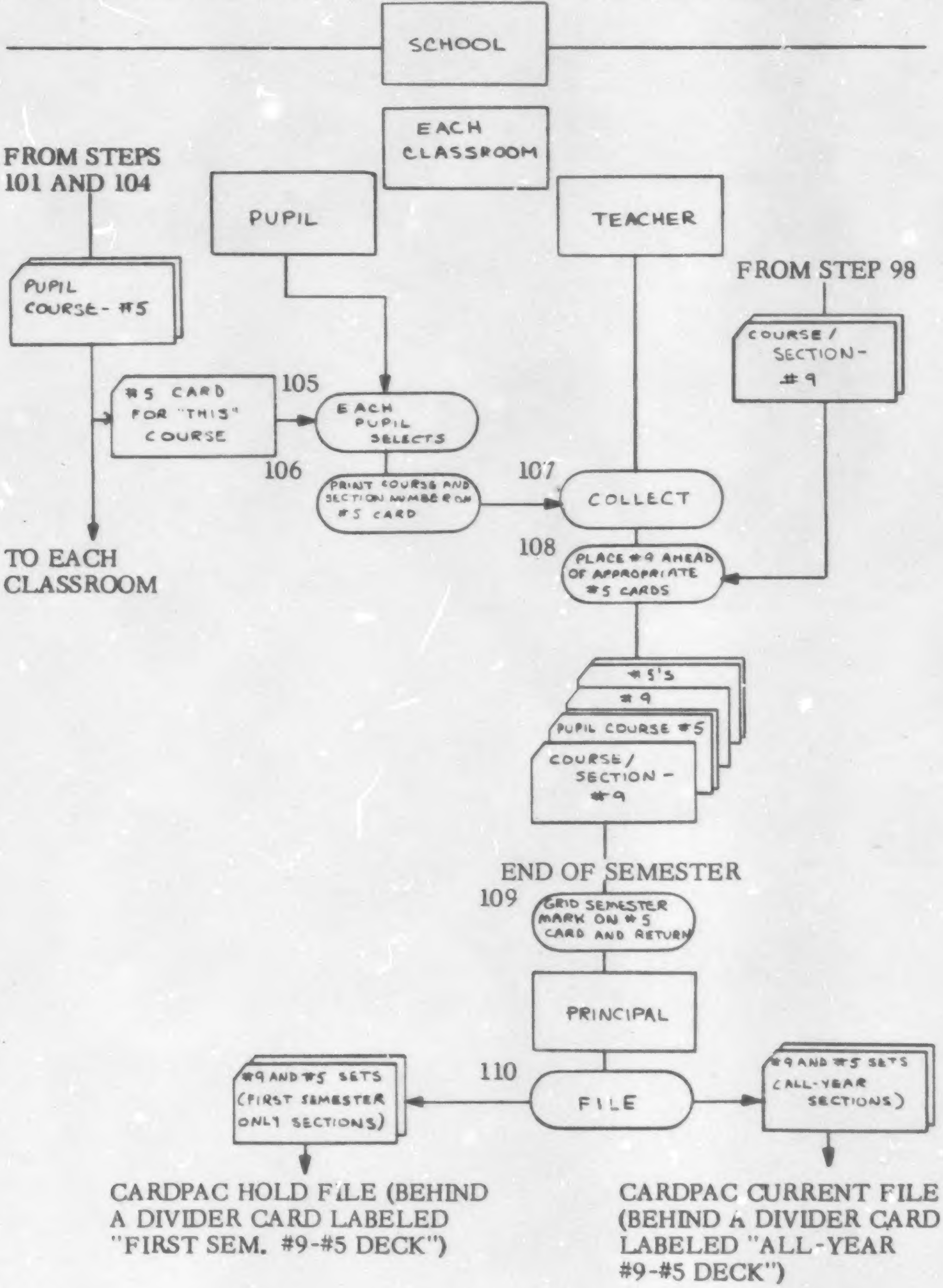
107. The teacher collects a Pupil Course Card #5 from each pupil in his class. (The #5 cards for absentees are received when makeup procedures are completed.)

108. The teacher places the #5 cards for a class behind the representative Course/Section Card #9. Steps 105 through 108 are repeated for each current class. These sets of #9 and #5 cards representing each class are retained by the teacher until the close of the semester and/or mid-year marking period.

109. Each teacher records the first semester or mid-year mark for each pupil by gridding the appropriate oval in the "First Semester Mark" area on his Pupil Course Card #5. Maintaining the sequence of the Course/Section Card #9 followed by the Pupil Course Cards #5, for that section, the teacher places a rubber band around each set. The sets are returned to the principal.

110. The sets of #9 and #5 cards for "first semester only" sections are complete. They are placed behind a divider card labeled "First Semester, #9-#5 Deck" in the CardPac Hold File for later shipment to IEIC. The sets of #9 and #5 cards for "all-year" sections will be used again at the close of the school year. They are placed behind a divider card labeled "All-year, #9-#5 Deck" in the CardPac Current File.

(FIRST SEMESTER CARDPAC COURSE DAY AND MARK REPORTING - Page 3 of 3)


SCHOOL
EACH CLASSROOM
FROM STEPS 101 AND 104
PUPIL
TEACHER
FROM STEP 98
PUPIL COURSE- #5
COURSE/ SECTION- #9
105
#5 CARD FOR "THIS" COURSE
EACH PUPIL SELECTS
106
PRINT COURSE AND SECTION NUMBER ON #5 CARD
107
COLLECT
108
PLACE #9 AHEAD OF APPROPRIATE #5 CARDS
TO EACH CLASSROOM
#5'S
#9
PUPIL COURSE #5
COURSE/ SECTION - #9
END OF SEMESTER
109
GRID SEMESTER MARK ON #5 CARD AND RETURN
PRINCIPAL
110
FILE
#9 AND #5 SETS (FIRST SEMESTER ONLY SECTIONS)
#9 AND #5 SETS (ALL-YEAR SECTIONS)
CARDPAC HOLD FILE (BEHIND A DIVIDER CARD LABELED "FIRST SEM. #9-#5 DECK")
CARDPAC CURRENT FILE (BEHIND A DIVIDER CARD LABELED "ALL-YEAR #9-#5 DECK")

PHASE V

STEPS 111-112: IEIC APRIL SHIPMENT TO SCHOOLS

111. A cover letter and a sample copy of materials to be sent to the schools in Step 112 are mailed to the district superintendents. These samples include:

Principal's Instructions, Spring 1967.
Proctor's Instructions for CardPac Inventory Day.
Attendance and Enrollment Instructions.
Order of Materials for Return Shipment.
Pupil Inventory booklets, Spring 1967.
Pupil Answer Card #4.

112. The following materials are sent to the schools early in April:

a. Principal's Instructions, Spring 1967 (one per school)

b. Proctor's Instructions for CardPac Inventory Day (5% of the N-count [pupil population reported by the principal in Step 58], minimum of 10)

c. Attendance and Enrollment Instructions (two per school)

d. Illustration showing order of materials for return shipment (one per school)

e. Pupil Inventory booklets, Spring 1967 (N-count plus 10%)

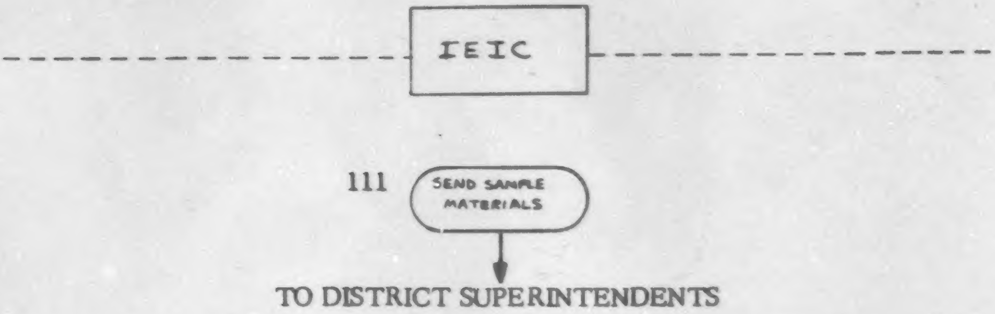
f. Blank Pupil Answer Cards #4, from stock for Pupil Inventory (N-count plus 10%)

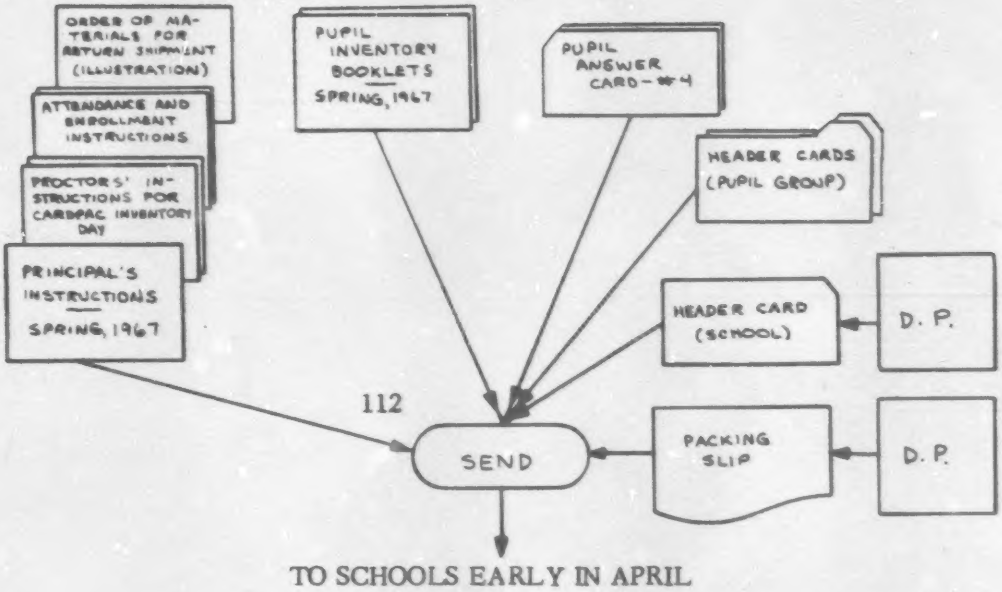
g. Blank Header Cards from stock, to be used in identifying groups of pupils who will be transferring to another school within the district next year (two per junior high school, zero per high school)

h. Header Card (school), with preidentified label (one per school)

i. Packing Slip

(THIRD SHIPMENT TO SCHOOLS)


IEIC
111
SEND SAMPLE MATERIALS
TO DISTRICT SUPERINTENDENTS

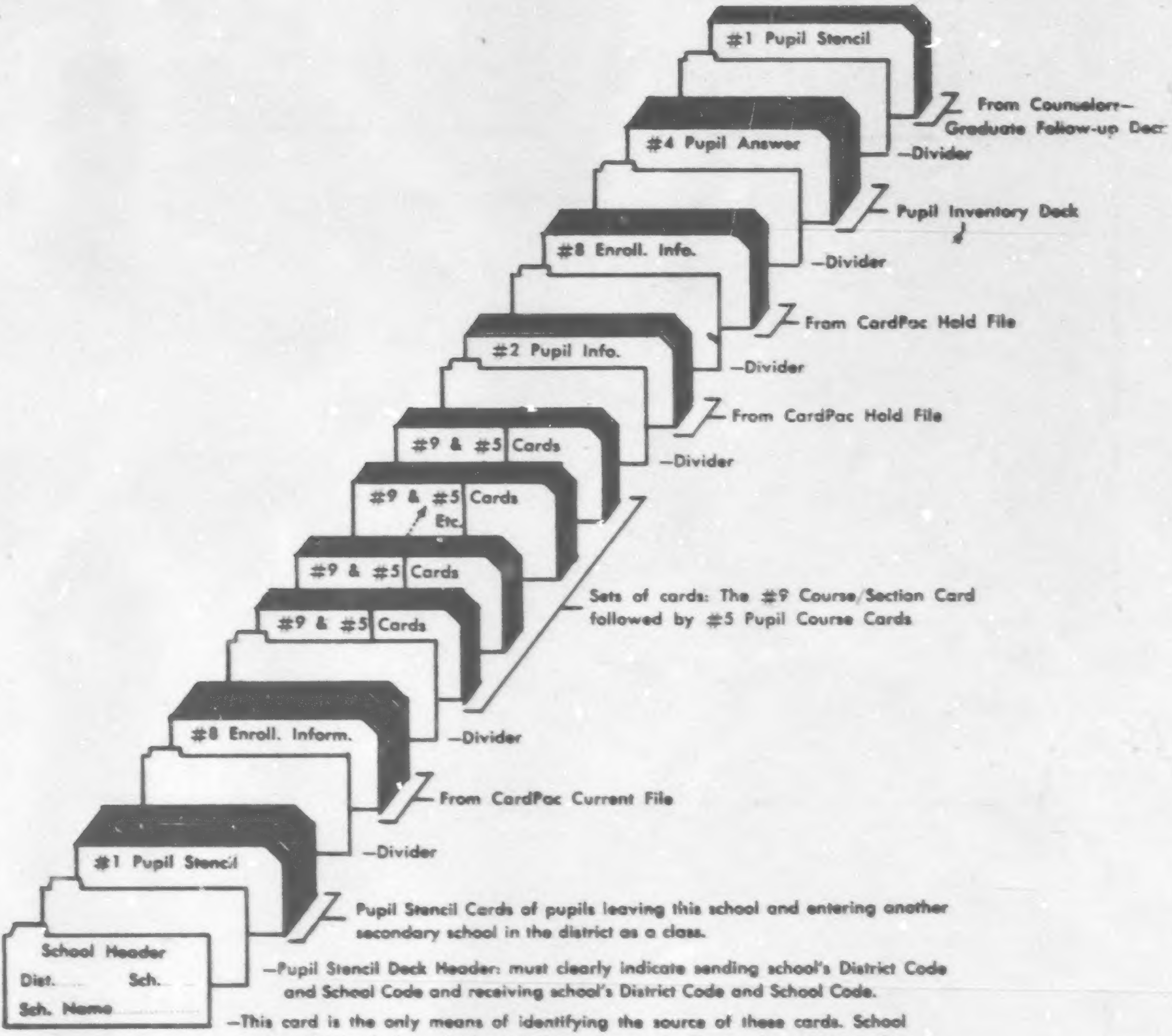

ORDER OF MA-TERIALS FOR RETURN SHIPMENT (ILLUSTRATION)
ATTENDANCE AND ENROLLMENT INSTRUCTIONS
PROCTORS' IN-STRUCTIONS FOR CARDPAC INVENTORY DAY
PRINCIPAL'S INSTRUCTIONS SPRING, 1967
PUPIL INVENTORY BOOKLETS SPRING, 1967
PUPIL ANSWER CARD-#4
HEADER CARDS (PUPIL GROUP)
HEADER CARD (SCHOOL)
D. P.
112
SEND
PACKING SLIP
D. P.
TO SCHOOLS EARLY IN APRIL

PHASE V INPUT AND OUTPUT DOCUMENTS

1. Order of Materials for Return Shipment on June 15, 1967
2. Pupil Answer Card #4

FIGURE 15

ORDER OF MATERIALS FOR RETURN SHIPMENT ON JUNE 15, 1967


#1 Pupil Stencil
#4 Pupil Answer
#8 Enroll. Info.
#2 Pupil Info.
#9 & #5 Cards
#9 & #5 Cards
Etc.
#9 & #5 Cards
#9 & #5 Cards
#8 Enroll. Inform.
#1 Pupil Stencil
School Header
Dist. ......
Sch. ......
Sch. Name ....

From Counselors—
Graduate Follow-up Dec

—Divider

Pupil Inventory Deck

—Divider

From CardPac Hold File

—Divider

From CardPac Hold File

—Divider

Sets of cards: The #9 Course/Section Card followed by #5 Pupil Course Cards

—Divider

From CardPac Current File

—Divider

Pupil Stencil Cards of pupils leaving this school and entering another secondary school in the district as a class.

—Pupil Stencil Deck Header: must clearly indicate sending school's District Code and School Code and receiving school's District Code and School Code.

—This card is the only means of identifying the source of these cards. School name, District Code and School Code numbers must be clearly written on this card.

Professional Staff Listing

—Updated during year, Finalized, & returned with above CardPac materials

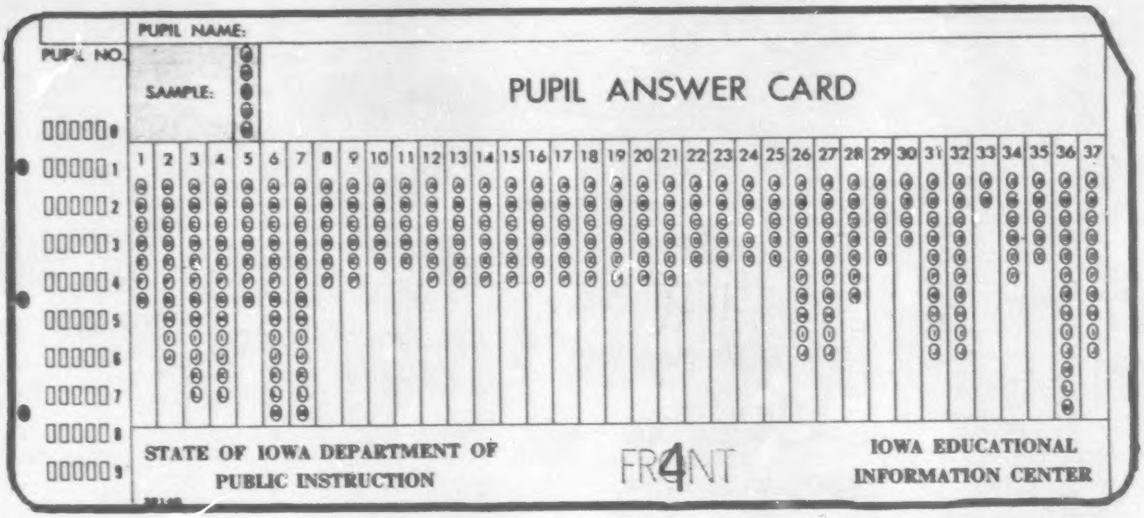
Return to
CARDPAC PROCESSING CENTER
321 EAST MARKET STREET
IOWA CITY, IOWA 52240

JUNE 15, 1967

FIGURE 16

PUPIL ANSWER CARD #4

(Front)



PUPIL NAME:

PUPIL NO.

SAMPLE:

PUPIL ANSWER CARD

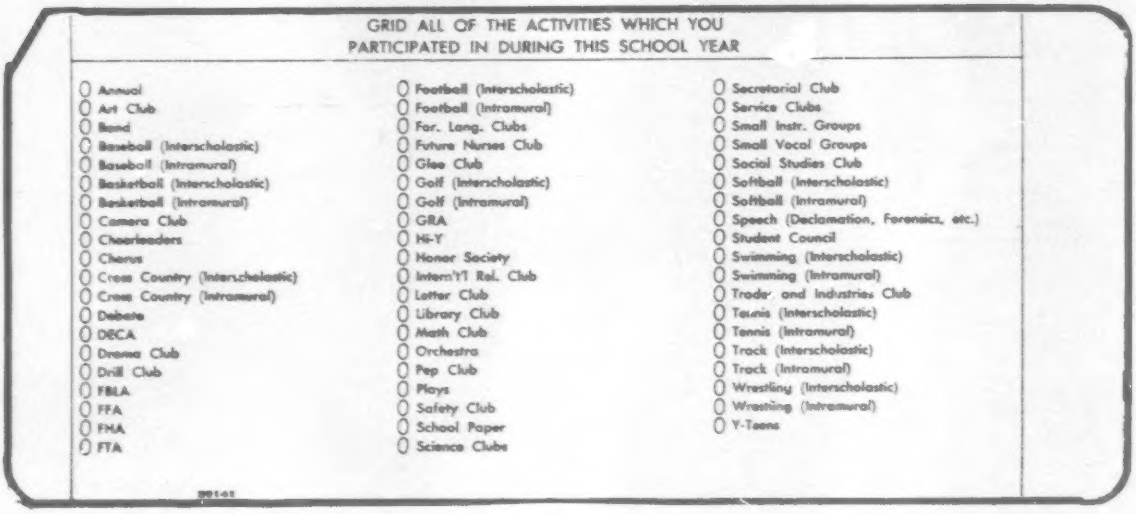
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37

STATE OF IOWA DEPARTMENT OF PUBLIC INSTRUCTION

FRONT 4

IOWA EDUCATIONAL INFORMATION CENTER

(Back)



GRID ALL OF THE ACTIVITIES WHICH YOU PARTICIPATED IN DURING THIS SCHOOL YEAR

- ○ Annual
- ○ Art Club
- ○ Band
- ○ Baseball (Interscholastic)
- ○ Baseball (Intramural)
- ○ Basketball (Interscholastic)
- ○ Basketball (Intramural)
- ○ Camera Club
- ○ Cheerleaders
- ○ Chorus
- ○ Cross Country (Interscholastic)
- ○ Cross Country (Intramural)
- ○ Debate
- ○ DECA
- ○ Drama Club
- ○ Drill Club
- ○ FBLA
- ○ FFA
- ○ FHA
- ○ FTA
- ○ Football (Interscholastic)
- ○ Football (Intramural)
- ○ For. Lang. Clubs
- ○ Future Nurses Club
- ○ Glee Club
- ○ Golf (Interscholastic)
- ○ Golf (Intramural)
- ○ GRA
- ○ Hi-Y
- ○ Honor Society
- ○ Intern'l'l Rel. Club
- ○ Letter Club
- ○ Library Club
- ○ Math Club
- ○ Orchestra
- ○ Pep Club
- ○ Plays
- ○ Safety Club
- ○ School Paper
- ○ Science Clubs
- ○ Secretarial Club
- ○ Service Clubs
- ○ Small Instr. Groups
- ○ Small Vocal Groups
- ○ Social Studies Club
- ○ Softball (Interscholastic)
- ○ Softball (Intramural)
- ○ Speech (Declamation, Forensics, etc.)
- ○ Student Council
- ○ Swimming (Interscholastic)
- ○ Swimming (Intramural)
- ○ Trades and Industries Club
- ○ Tennis (Interscholastic)
- ○ Tennis (Intramural)
- ○ Track (Interscholastic)
- ○ Track (Intramural)
- ○ Wrestling (Interscholastic)
- ○ Wrestling (Intramural)
- ○ Y-Teens

PHASE VI

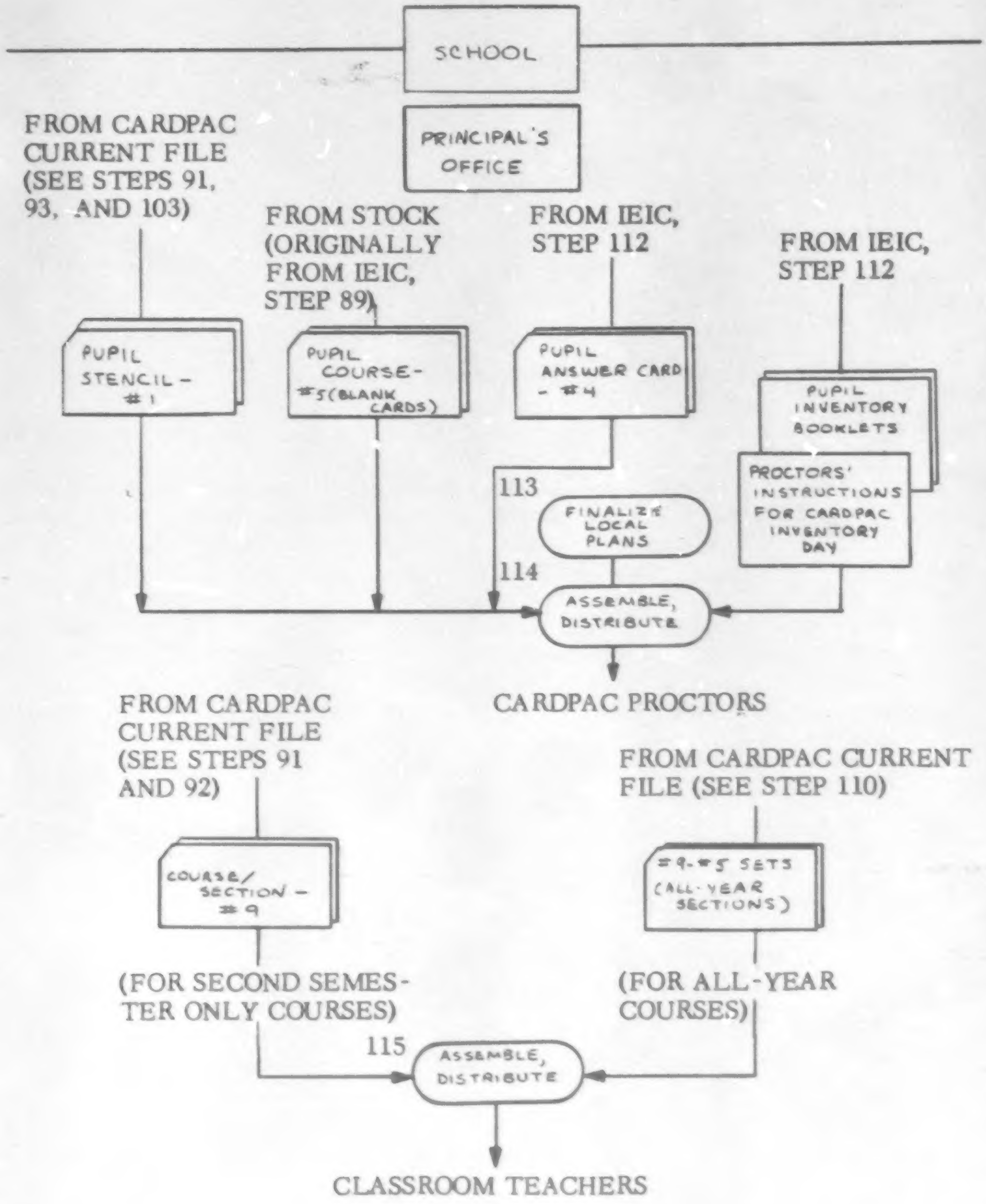
STEPS 113-128: SCHOOL CARDPAC INVENTORY DAY AND MARK REPORTING PROCEDURES

113. The principal finalizes local plans for a CardPac Inventory Day to be held before the close of the school year and determines the makeup procedure for anticipated absentees. (On "Inventory Day" pupils record their responses to the Pupil Inventory questions and their Pupil Activity participation during the current school year. The process includes preparation and distribution of the materials needed by each teacher to report second semester and/or all-year marks.)

114. Materials are assembled and distributed to CardPac proctors for their review prior to CardPac Inventory Day. Each proctor receives the Assigned Pupil Stencil Cards #1 for his group; a supply of blank Pupil Course Cards #5, to equal one card for each "second semester only" course in which each pupil in his group is enrolled; a supply of blank Pupil Inventory Answer Cards #4, to equal the number of pupils in his group; and a copy of the "Proctor's Instructions for CardPac Inventory Day."

115. Materials are assembled and distributed to classroom teachers for their review prior to CardPac Inventory Day. Each teacher receives a preidentified Course/Section Card #9 for each section he is currently teaching. (When sections are taught as "all-year" courses the Pupil Course Cards #5, with previously recorded first semester marks, will be included behind the appropriate Course/Section Card #9.)

(CARDPAC INVENTORY DAY - Page 1 of 2)


SCHOOL
PRINCIPAL'S OFFICE
FROM CARDPAC CURRENT FILE (SEE STEPS 91, 93, AND 103)
FROM STOCK (ORIGINALLY FROM IEIC, STEP 89)
FROM IEIC, STEP 112
FROM IEIC, STEP 112
PUPIL STENCIL - #1
PUPIL COURSE- #5 (BLANK CARDS)
PUPIL ANSWER CARD - #4
PUPIL INVENTORY BOOKLETS
PROCTORS' INSTRUCTIONS FOR CARDPAC INVENTORY DAY
113
FINALIZE LOCAL PLANS
114
ASSEMBLE, DISTRIBUTE
CARDPAC PROCTORS
FROM CARDPAC CURRENT FILE (SEE STEPS 91 AND 92)
FROM CARDPAC CURRENT FILE (SEE STEP 110)
COURSE/ SECTION - #9
#9-#5 SETS (ALL-YEAR SECTIONS)
(FOR SECOND SEMESTER ONLY COURSES)
(FOR ALL-YEAR COURSES)
115
ASSEMBLE, DISTRIBUTE
CLASSROOM TEACHERS

116. The proctor of each CardPac group distributes to each pupil his pre-identified Assigned Pupil Stencil Card #1; blank Pupil Course Cards #5, to equal the number of "second semester only" courses in which he is enrolled; and one blank Pupil Inventory Answer Card #4. (The #1 cards for absent pupils establish a record of pupils to be included in the make-up procedure.)

117. Using one #5 card for each "second semester only" course, each pupil prints his name and course title on each card. Each pupil prints his name on his Pupil Answer Card #4. With his Pupil Stencil Card #1, each pupil stencils his pupil number on each of his Pupil Course Cards #5, and on his Pupil Answer Card #4. He returns his Stencil Card to the CardPac proctor.

118. The proctor distributes a Pupil Inventory Booklet to each pupil.

119. Each pupil answers the Pupil Inventory questions by gridding his responses on the front of the Pupil Answer Card #4. He records his current year participation in Pupil Activities by gridding the appropriate ovals on the back of the card. The booklet and answer card are returned to the proctor. Each pupil takes his Pupil Course Cards #5 for "second-semester only" courses to the next meeting of these classes.

120. The proctor groups the Pupil Stencil Cards #1 from Step 117 in alphabetic sequence, places a rubber band around them, and identifies them as "present on CardPac Inventory Day." The Pupil Answer Cards #4 are banded together and identified as "Inventory Completed." The #1 cards for absent pupils from Step 116 are banded together and identified as "absent on CardPac Inventory Day." These three groups of cards, the Pupil Inventory booklets, and any unused #4 or #5 cards are returned to the principal's office.

121. The principal assembles the cards received from all CardPac proctors for the following disposition:

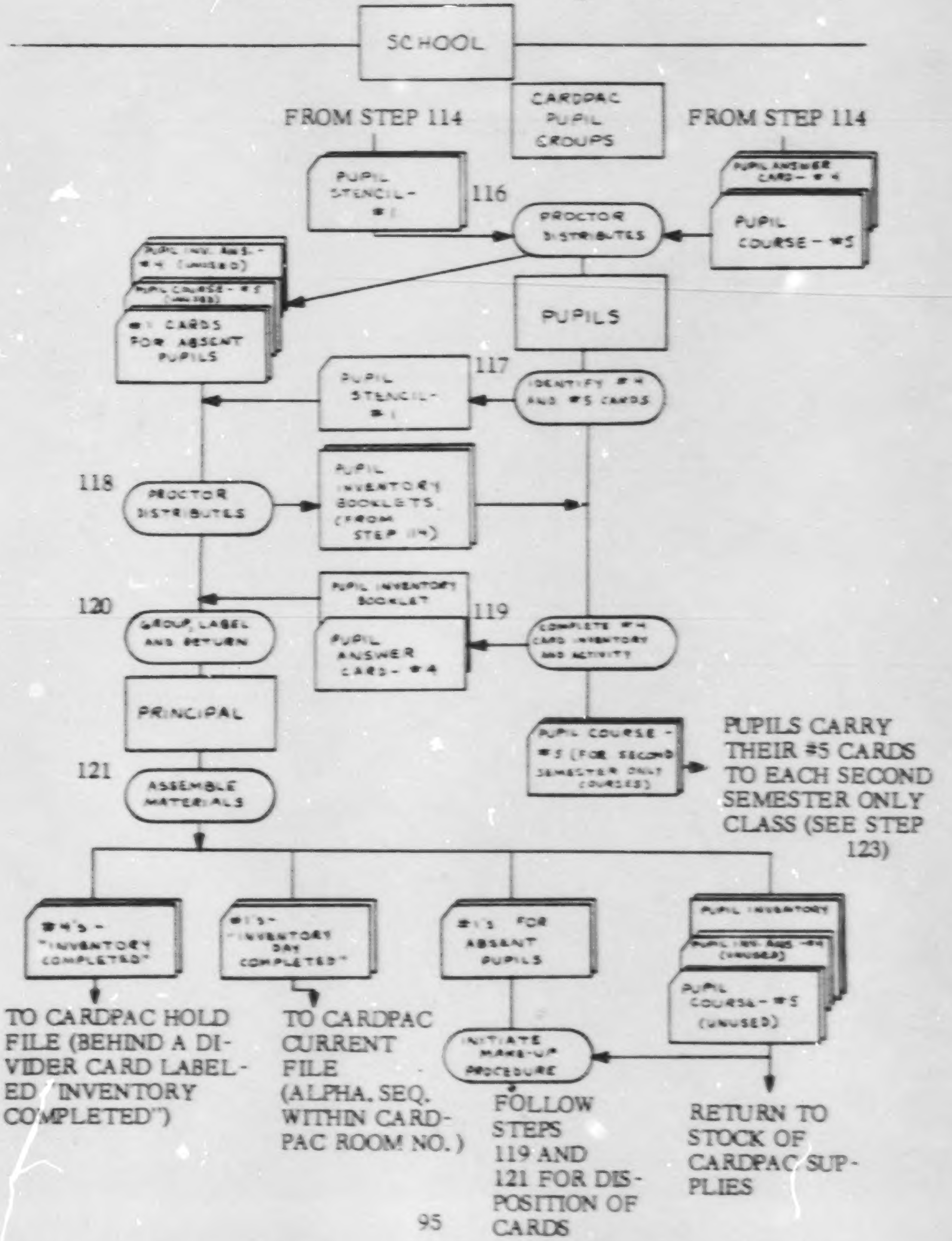
    a. The completed Pupil Inventory Answer Cards #4 are placed behind a divider card labeled "Inventory Completed" in the CardPac Hold File for later shipment to IEIC.

    b. Stencil Cards #1 for pupils who were present are returned to the CardPac Current File.

    c. Stencil Cards #1 for pupils who were absent are held for Step 122.

122. The principal initiates the procedure for absent pupils. When completed, the cards from this procedure are disposed of in accord with Steps 119 and 121.

(CARDPAC INVENTORY DAY - Page 2 of 2)


SCHOOL
CARDPAC PUPIL GROUPS
FROM STEP 114
PUPIL STENCIL- #1
116
PROCTOR DISTRIBUTES
FROM STEP 114
PUPIL ANSWER CARD - #4
PUPIL COURSE - #5
PUPIL INV. ANS. - #4 (UNUSED)
PUPIL COURSE - #5 (UNUSED)
#1 CARDS FOR ABSENT PUPILS
PUPILS
117
PUPIL STENCIL- #1
IDENTIFY #4 AND #5 CARDS
118
PROCTOR DISTRIBUTES
PUPIL INVENTORY BOOKLETS (FROM STEP 114)
120
PUPIL INVENTORY BOOKLET
119
GROUP, LABEL AND RETURN
PUPIL ANSWER CARD - #4
COMPLETE #4 CARD INVENTORY AND ACTIVITY
PRINCIPAL
PUPIL COURSE - #5 (FOR SECOND SEMESTER ONLY COURSES)
PUPILS CARRY THEIR #5 CARDS TO EACH SECOND SEMESTER ONLY CLASS (SEE STEP 123)
121
ASSEMBLE MATERIALS
#4'S - "INVENTORY COMPLETED"
#1'S - "INVENTORY DAY COMPLETED"
#1'S FOR ABSENT PUPILS
PUPIL INVENTORY
PUPIL INV. ANS. #4 (UNUSED)
PUPIL COURSE - #5 (UNUSED)
TO CARDPAC HOLD FILE (BEHIND A DIVIDER CARD LABELED "INVENTORY COMPLETED")
TO CARDPAC CURRENT FILE (ALPHA. SEQ. WITHIN CARDPAC ROOM NO.)
INITIATE MAKE-UP PROCEDURE
FOLLOW STEPS 119 AND 121 FOR DISPOSITION OF CARDS
RETURN TO STOCK OF CARDPAC SUPPLIES

123. In each classroom of "second semester only" courses each pupil selects the Pupil Course Card #5 he previously identified for "this" class.

124. Teachers of "second semester only" sections instruct each pupil to print the course number and section number of "this" class on his #5 card. (The teacher uses the course and section numbers shown on the Course/Section Card #9 he will use to represent this section.)

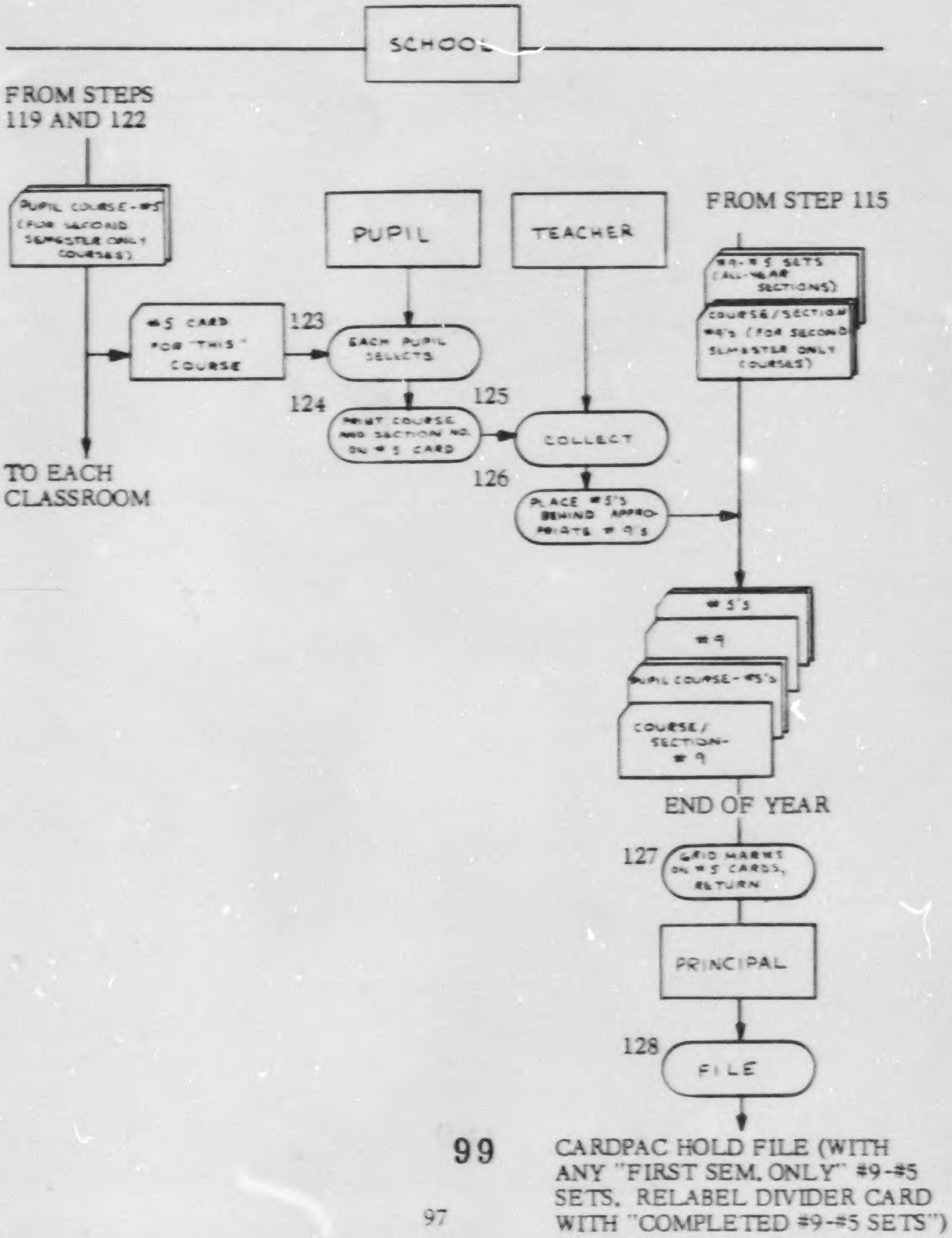
125. The teacher collects a Pupil Course Card #5 from each pupil in a "second semester only" class. (The #5 cards for absentees are received when makeup procedures are completed.)

126. The teacher places the #5 cards for a "second semester only" class behind the representative Course/Section Card #9. Steps 123 through 126 are repeated for each "second semester only" class. These sets of #9 and #5 cards representing each class are retained by the teacher until the close of the final marking period. (When sections are taught as "all-year" classes the #9-#5 sets for these sections were returned to the teacher in Step 115.)

127. At the close of the school year each teacher records the current mark for each pupil by gridding the appropriate oval in the "Second Semester Mark" area on his Pupil Course Card #5. Maintaining the sequence of the Course/Section Card #9, followed by the Pupil Course Cards #5 for that section, the teacher places a rubber band around each set. The sets are returned to the principal.

128. The sets of #9 and #5 cards are placed behind a divider card labeled "Completed #9-#5 sets" in the CardPac Hold File for shipment to IEIC.

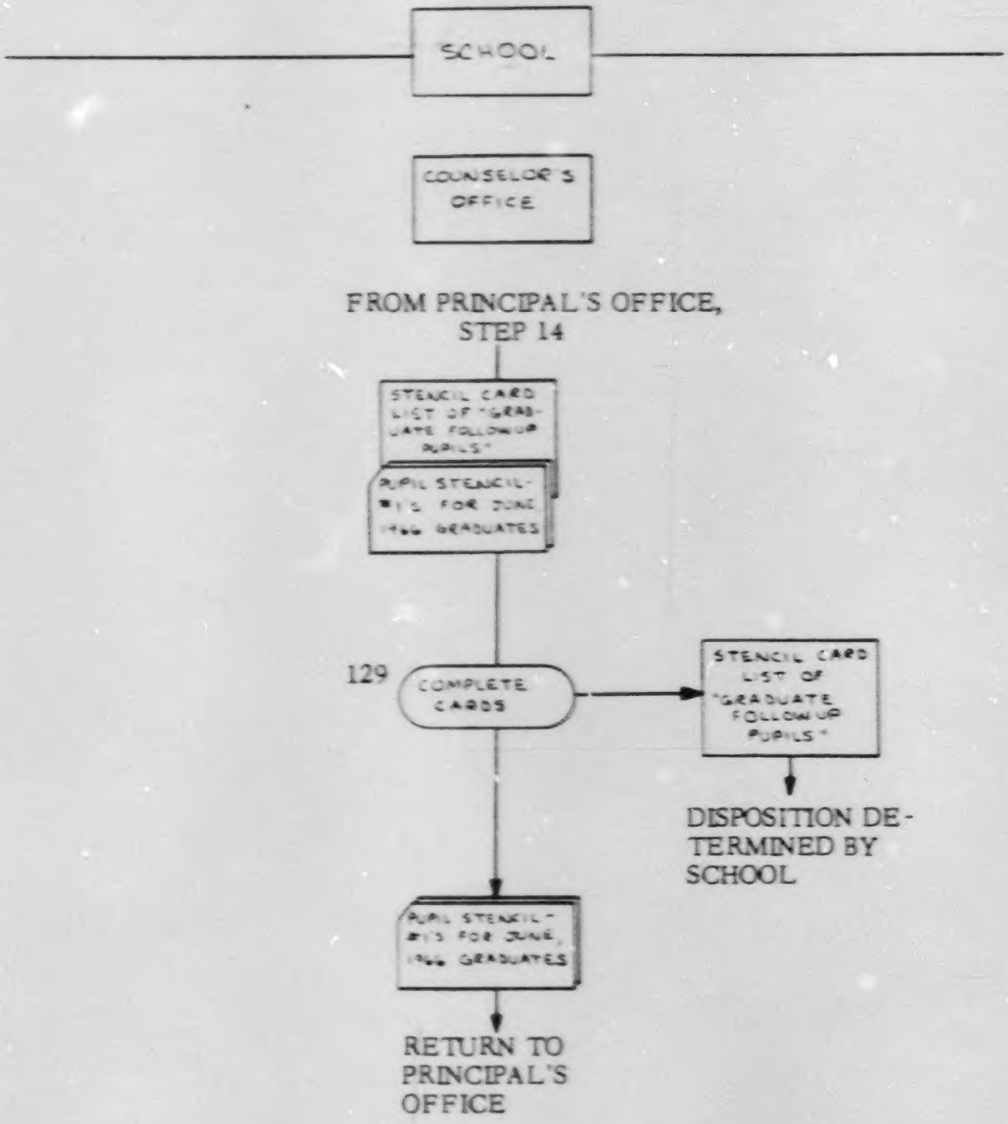
(END-OF-THE-YEAR MARK REPORTING)


SCHOOL
FROM STEPS 119 AND 122
PUPIL COURSE-#5 (FOR SECOND SEMESTER ONLY COURSES)
#5 CARD FOR "THIS" COURSE
TO EACH CLASSROOM
PUPIL
TEACHER
FROM STEP 115
#9-#5 SETS (ALL-YEAR SECTIONS)
COURSE/SECTION #9's (FOR SECOND SEMESTER ONLY COURSES)
123
EACH PUPIL SELECTS
124
PRINT COURSE AND SECTION NO. ON #5 CARD
125
COLLECT
126
PLACE #5'S BEHIND APPROPRIATE #9'S
#5'S
#9
PUPIL COURSE-#5'S
COURSE/SECTION-#9
END OF YEAR
127
GRID MARKS ON #5 CARDS, RETURN
PRINCIPAL
128
FILE
CARDPAC HOLD FILE (WITH ANY "FIRST SEM. ONLY" #9-#5 SETS. RELABEL DIVIDER CARD WITH "COMPLETED #9-#5 SETS")

STEP 129: REPORTING GRADUATE FOLLOWUP INFORMATION

129. The "Graduate Followup Pupils" portion of the Assigned Pupil Stencil Card List was edited in the principal's office to include only June, 1966, graduates. The list and matching Pupil Stencil Cards #1 were sent to the counselors' office in the fall of 1966 (see Step 14). In the spring of 1967 counselors gather graduate follow-up information and record it on the back of the #1 card. When the graduate is continuing his formal education, appropriate ovals are gridded to indicate type of education and "in state" or "out of state" location of the institution. Graduates not continuing their formal education are identified by type of occupation classifications. The cards are returned to the principal's office for inclusion in the June 15th shipment to IEIC.

(REPORTING GRADUATE FOLLOW-UP INFORMATION)

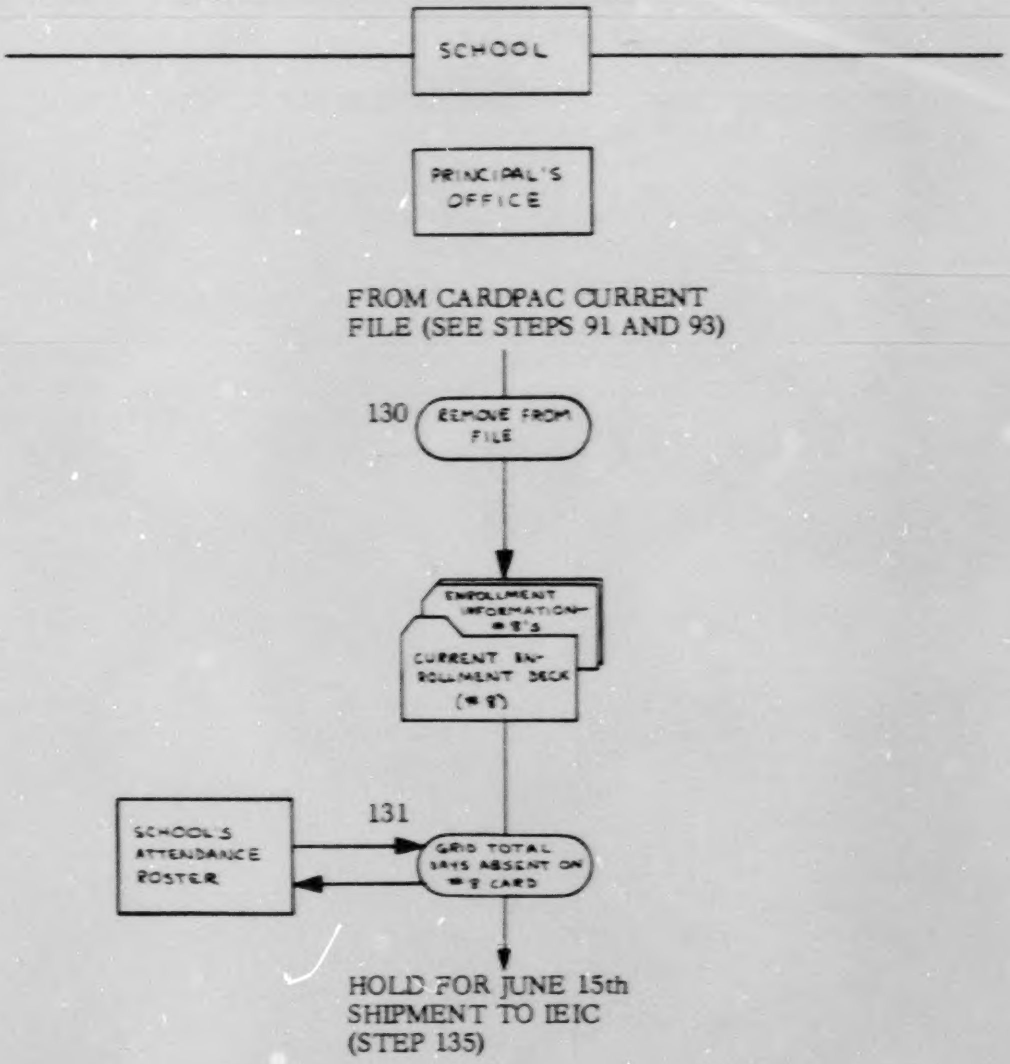

SCHOOL
COUNSELOR'S OFFICE
FROM PRINCIPAL'S OFFICE, STEP 14
STENCIL CARD LIST OF "GRADUATE FOLLOW-UP PUPILS"
PUPIL STENCIL-#1'S FOR JUNE 1966 GRADUATES
129
COMPLETE CARDS
STENCIL CARD LIST OF "GRADUATE FOLLOW-UP PUPILS"
DISPOSITION DETERMINED BY SCHOOL
PUPIL STENCIL-#1'S FOR JUNE, 1966 GRADUATES
RETURN TO PRINCIPAL'S OFFICE

STEPS 130-131: REPORTING ATTENDANCE INFORMATION

130. At the close of the school year the Enrollment Information Cards #8 are removed from the CardPac Current File. These cards are in sequence by grade, pupil name, and pupil number. Having followed the maintenance procedure outlined in Step 93, there is a current #8 card in this deck for each currently enrolled pupil as of the last day of school.

131. "Total days absent" is gridded for each pupil on his #8 card from data shown on the school's attendance register. The cards are held for the June 15th shipment to IEIC.

(REPORTING ATTENDANCE INFORMATION)


SCHOOL
PRINCIPAL'S OFFICE
FROM CARDPAC CURRENT FILE (SEE STEPS 91 AND 93)
130
REMOVE FROM FILE
ENROLLMENT INFORMATION— #8's
CURRENT ENROLLMENT DECK (#8)
131
SCHOOL'S ATTENDANCE ROSTER
GRID TOTAL DAYS ABSENT ON #8 CARD
HOLD FOR JUNE 15th SHIPMENT TO IEIC (STEP 135)

STEPS 132-139: FINAL PROCEDURES AT THE SCHOOL

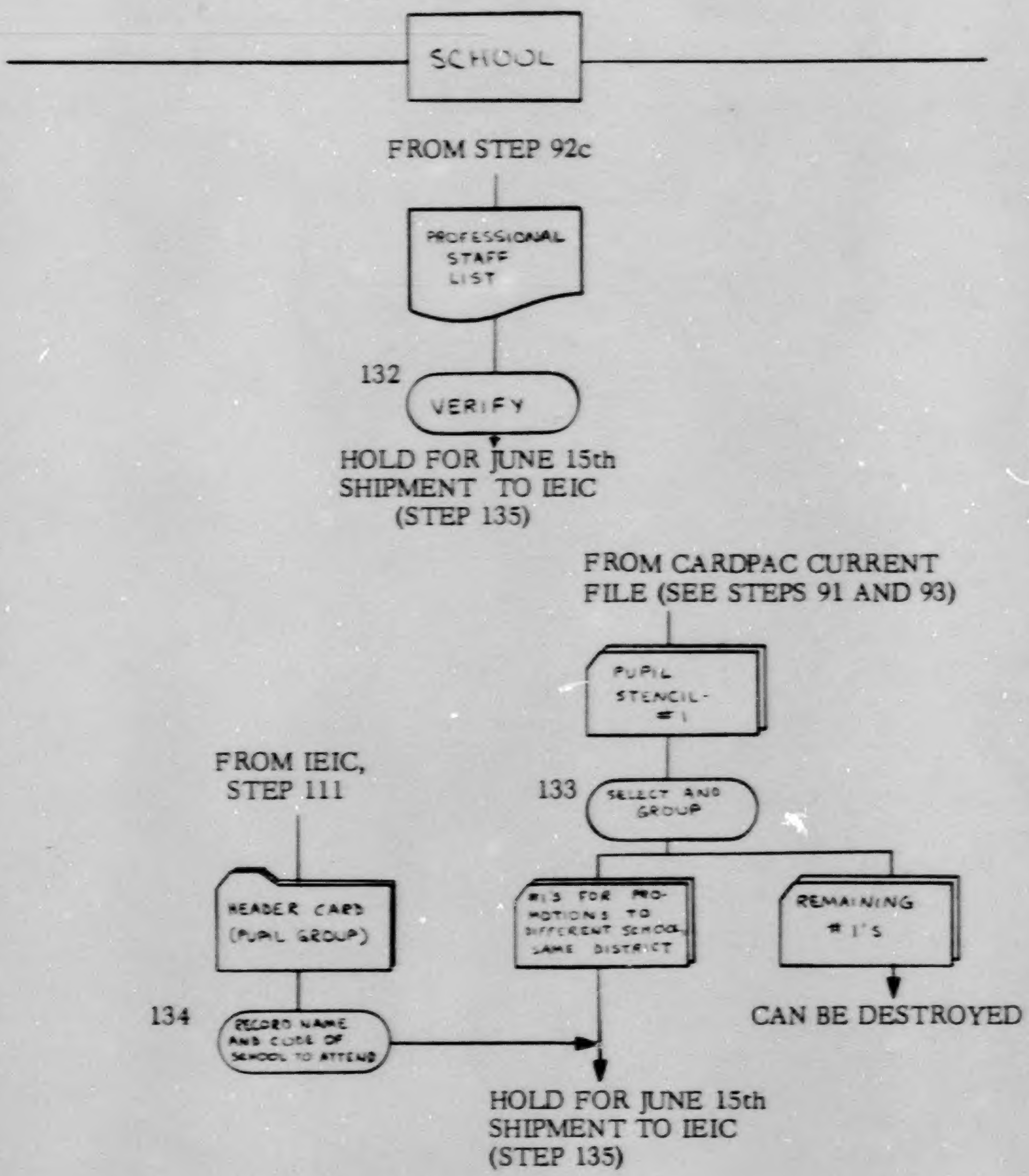
132. Having followed the procedure outlined in Step 92c, the Professional Staff List contains the name, Social Security number and staff code for each person who is currently a member of the professional staff. Changes or corrections in a staff member's name or Social Security number and withdrawals have been indicated. After a final verification of this list, it is to be included in the June 15th shipment to IEIC.

133. The deck of Pupil Stencil Cards #1 representing currently enrolled pupils as of the last day of school is removed from the CardPac Current File. These cards are in alphabetic sequence within CardPac room number. The #1 cards for pupils who, as members of a class, will be attending a different secondary school in the same district next year (such as promotions from junior high to senior high school) are selected and grouped by "school to attend."

134. Each group of stencil cards from Step 133 representing pupils entering a different secondary school next year is identified by entering the code and name of the "school to attend" on a Header Card and placing it ahead of the group. These groups of cards are held for the June 15th shipment to IEIC.

Note: The Enrollment Information Cards #8 from Steps 131, 93b and 93c, together with "number of days of school" (total number of days school was in session during the 1966-1967 school year), which is reported by the school in Step 136, will provide IEIC with the necessary information to compute and prepare summary attendance reports. All #8 cards contain "day of school entered," which is prepunched in the preidentified cards or gridded on those originated by the school, and "total days absent". "Day of school dropped" has been gridded on the cards for pupils who withdrew from school prior to the last day of school. "Day of school dropped" (from "this" classification) has been gridded on any cards representing the former educational classification of a pupil who changed classifications during the school year.

(FINAL PROCEDURES - Page 1 of 2)


SCHOOL
FROM STEP 92c
PROFESSIONAL STAFF LIST
132
VERIFY
HOLD FOR JUNE 15th SHIPMENT TO IEIC (STEP 135)
FROM CARDPAC CURRENT FILE (SEE STEPS 91 AND 93)
PUPIL STENCIL-#1
133
SELECT AND GROUP
FROM IEIC, STEP 111
HEADER CARD (PUPIL GROUP)
#1'S FOR PROMOTIONS TO DIFFERENT SCHOOL SAME DISTRICT
REMAINING #1'S
134
RECORD NAME AND CODE OF SCHOOL TO ATTEND
CAN BE DESTROYED
HOLD FOR JUNE 15th SHIPMENT TO IEIC (STEP 135)

135. Materials are assembled and boxed in the following sequence for shipment to IEIC:

a. Groups of Header Cards and Pupil Stencil Cards #1 for pupils attending a different secondary school in the same school district next year. (from Step 133)

b. A divider card followed by the Enrollment Information Cards, #8, for the currently enrolled pupils as of the last day of school. (from Step 131)

c. A divider card followed by the Course/Section #9 and Pupil Course #5 sets of cards from the CardPac Hold File. (These sets entered the Hold File from Steps 110 and/or 128 and contain first semester only, second semester only and all-year curriculum information including pupil marks.)

d. A divider card followed by Pupil Information Cards #2 from the CardPac Hold File. (These cards, containing information on new pupils and information changes to existing CardPac pupil records, entered the CardPac Hold File from step 93a.)

e. A divider card followed by the Enrollment Information Cards #8 from the CardPac Hold File. These cards contain enrollment information for pupils who withdrew (Step 93b) or changed educational classification (Step 93c) during the school year.

f. A divider card followed by the Pupil Answer Cards #4 from the CardPac Hold File. (These cards entered the Hold File from Step 121 upon completion of the Pupil Inventory.)

g. A divider card followed by the Pupil Stencil Cards #1 for June, 1966, graduates. These cards contain graduate follow-up information. (from Step 129)

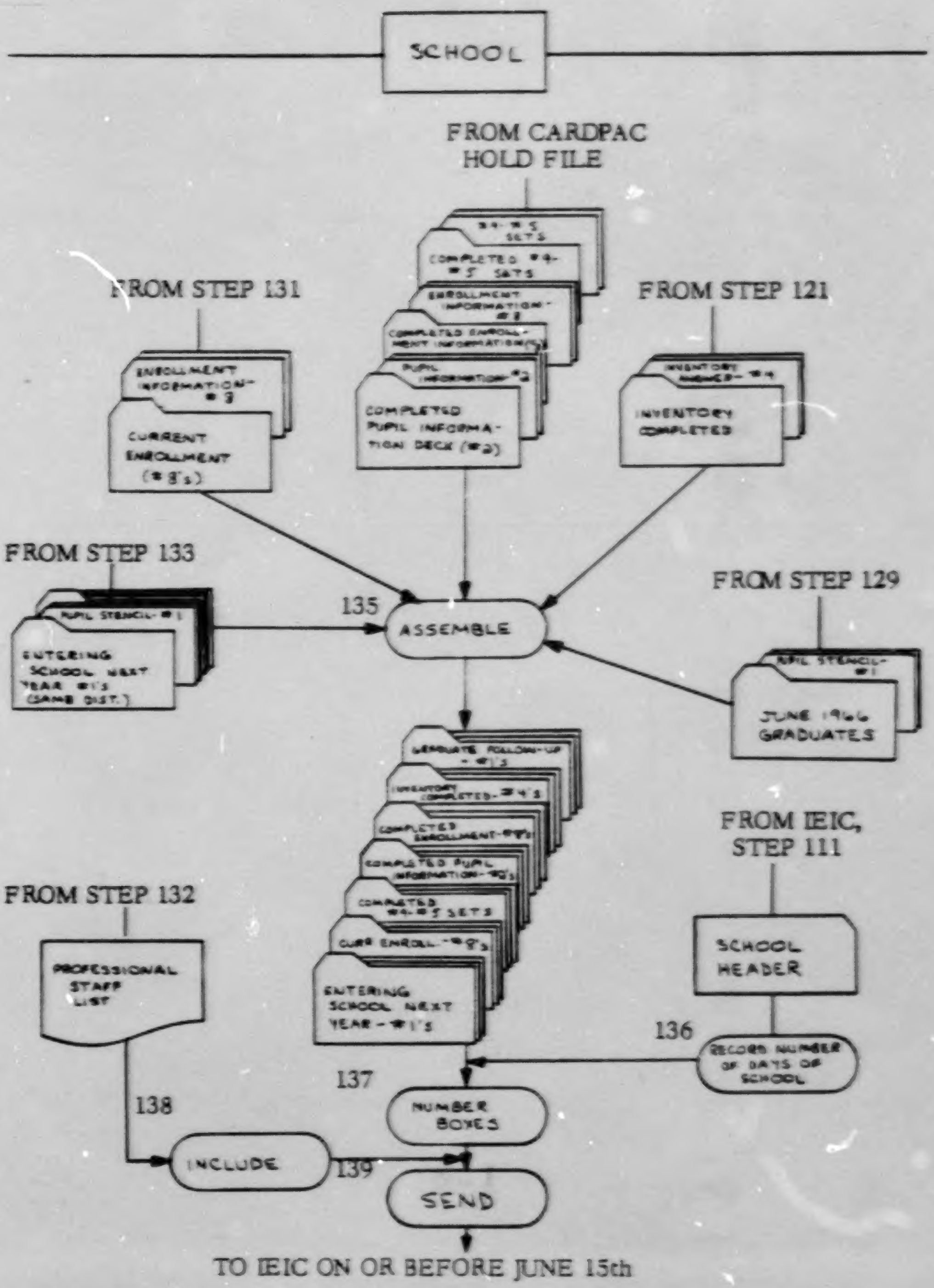
136. The preidentified school name, district code, school code, principal's name, city and state appearing on the Header Card received from IEIC in Step 111 are checked for accuracy. Any corrections are entered on the card. "Number of Days of School" this year (total number of days school was in session) is printed in the space provided. The card is inserted as the first card in the box for identification purposes. When there is more than one box, school name, district code, and school code are printed on a header card for each additional box.

137. Boxes are numbered to show their sequence and the total number of boxes. (Example: "1 of 3," "2 of 3,"etc.)

138. The updated Professional Staff List from Step 132 is included.

139. The materials are sent to IEIC on or before June 15th.

(FINAL PROCEDURES - Page 2 of 2)


SCHOOL
FROM CARDPAC HOLD FILE
#4-#5 SETS
COMPLETED #4-#5 SETS
ENROLLMENT INFORMATION-#8
COMPLETED ENROLLMENT INFORMATION(#8)
PUPIL INFORMATION-#2
COMPLETED PUPIL INFORMATION DECK (#2)
FROM STEP 131
ENROLLMENT INFORMATION-#8
CURRENT ENROLLMENT (#8's)
FROM STEP 121
INVENTORY ANSWER-#4
INVENTORY COMPLETED
FROM STEP 133
PUPIL STENCIL-#1
ENTERING SCHOOL NEXT YEAR #1's (SAME DIST.)
135
ASSEMBLE
FROM STEP 129
PUPIL STENCIL-#1
JUNE 1966 GRADUATES
GRADUATE FOLLOW-UP - #1's
INVENTORY COMPLETED-#4's
COMPLETED ENROLLMENT-#8's
COMPLETED PUPIL INFORMATION-#2's
COMPLETED #4-#5 SETS
CURR ENROLL-#8's
ENTERING SCHOOL NEXT YEAR - #1's
FROM IEIC, STEP 111
SCHOOL HEADER
136
RECORD NUMBER OF DAYS OF SCHOOL
FROM STEP 132
PROFESSIONAL STAFF LIST
137
NUMBER BOXES
138
INCLUDE
139
SEND
TO IEIC ON OR BEFORE JUNE 15th

PHASE VII
STEPS 140-166: FINAL PROCEDURES AT IEIC

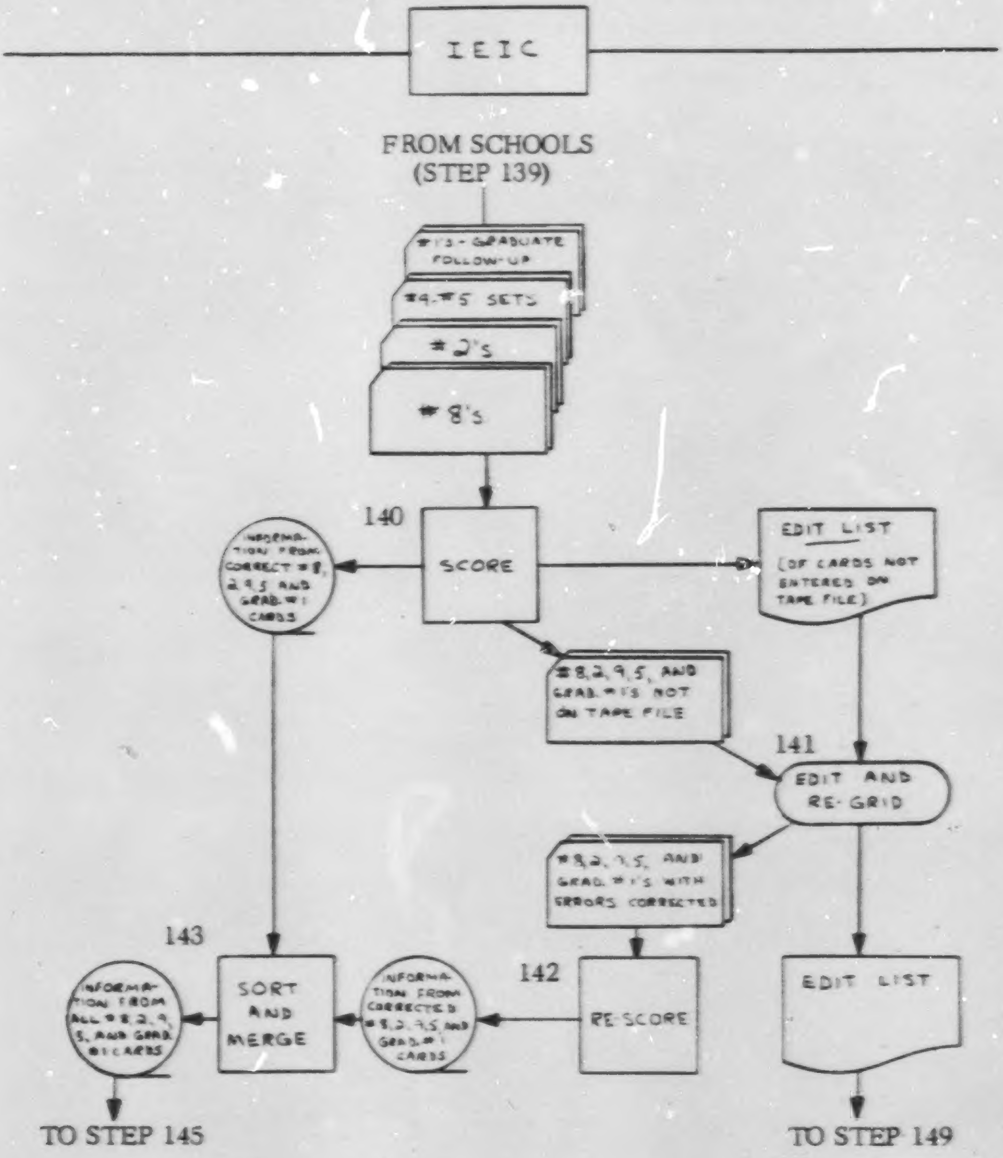
140. During a scoring process, cards submitted by schools in Step 139 (Enrollment Information #8; Pupil Information #2; sets of Course/Section #9 and Pupil Course #5; and Pupil Stencil #1, that contain graduate follow-up information for pupils who completed school during the 1965-1966 school year) are edited by a computer program for suspected errors. The #9 cards are also edited for changes in curriculum information. Information from cards "passing the edit" is transferred to a tape file. Cards containing suspected errors or notification of curriculum changes are selected. Information from these cards is printed on an edit list.

141. Using a manual edit, cards found to be in error are regridded with correct information. Any curriculum information changes indicated on Course/Section Cards #9 are posted to the Edit List.

142. As the corrected cards are rescored, the gridded and prepunched information is transferred to a tape file.

143. The two tape files of information from the #8, 2, 9, 5 and graduate 1 cards (from steps 140 and 142) are sorted and merged to produce a single tape file of this information in District Code, School Code, and Pupil Number sequence.

(ENTERING RECORDS FOR 1966-67 SCHOOL YEAR)


IEIC
FROM SCHOOLS (STEP 139)
#1'S - GRADUATE FOLLOW-UP
#4-#5 SETS
#2'S
#8'S
140
SCORE
INFORMATION FROM CORRECT #8, 2,4,5 AND GRAD. #1 CARDS
EDIT LIST (OF CARDS NOT ENTERED ON TAPE FILE)
#8,2,4,5, AND GRAD. #1'S NOT ON TAPE FILE
141
EDIT AND RE-GRID
#8,2,4,5, AND GRAD. #1'S WITH ERRORS CORRECTED
143
SORT AND MERGE
INFORMATION FROM ALL #8,2,4,5, AND GRAD. #1 CARDS
INFORMATION FROM CORRECTED #8,2,4,5, AND GRAD. #1 CARDS
142
RE-SCORE
EDIT LIST
TO STEP 145
TO STEP 149

144. The "number of days of school," as recorded by the schools on the School Header Cards in Step 136, is keypunched into data cards.

145. The tape file from Step 143, containing information currently submitted by the schools, and the data cards for "number of days of school" are processed with the Pupil Master File created in the fall of 1966. A new Pupil Master File is produced with updated basic pupil information. A separate tape file of attendance and enrollment information is also created.

146. IEIC tape files of attendance and enrollment information for schools using the IEIC Attendance and Mark Reporting Service and the attendance and enrollment tape file from Step 145 are used to prepare a Pupil Attendance List for each school. By grade, the report alphabetically lists the names of pupils enrolled during the school year and shows the pupil number, educational classification, total days present, and total days absent for each of these pupils.

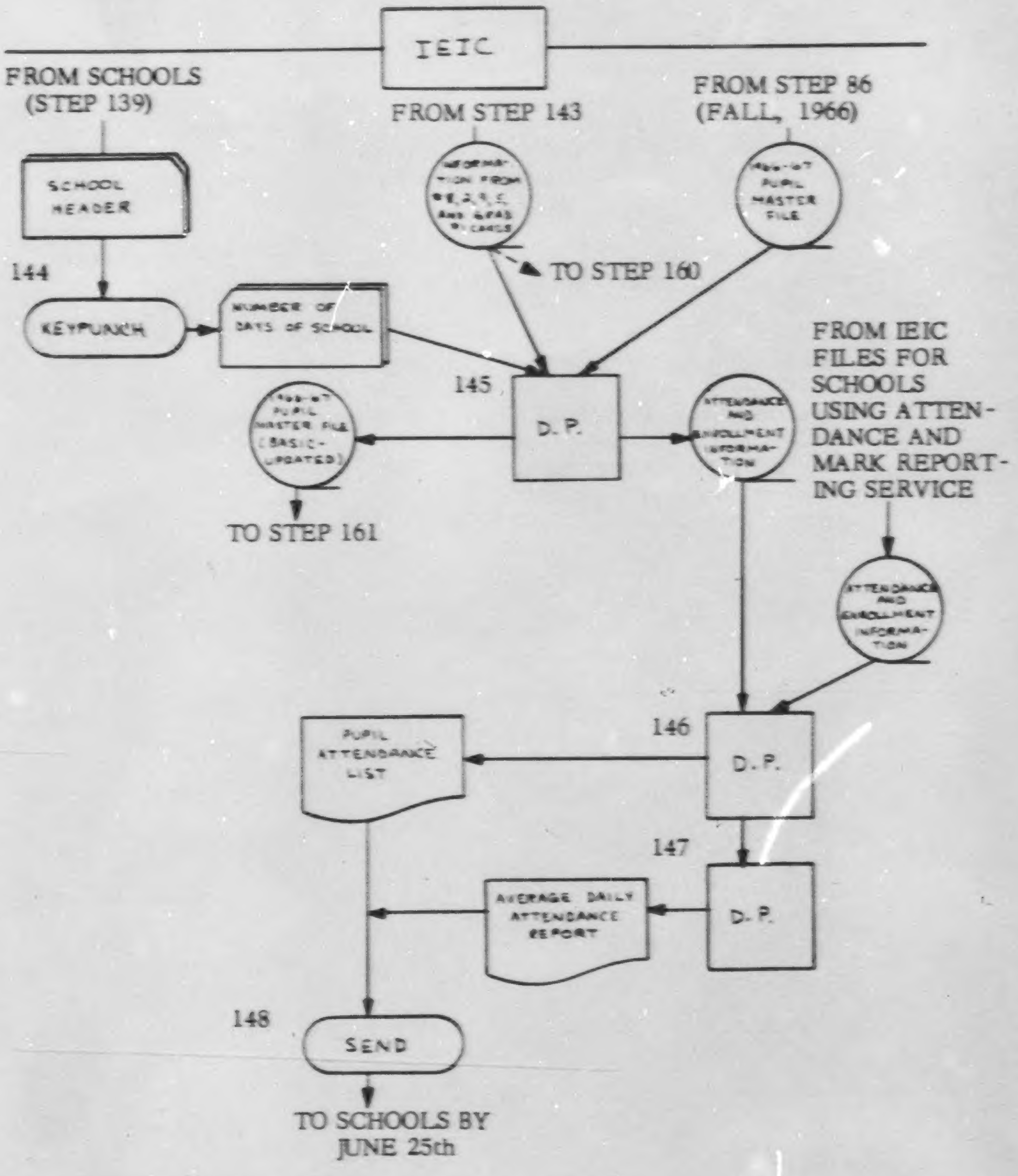
147. From the tape files used in Step 146 an Average Daily Attendance Report is prepared for each school summarizing attendance information by educational classification. For each educational classification the report shows attendance data computations by sex within grade, and in total by grade. The information is further summarized by sex within educational classification and in total by educational classification.

Another subdivision includes counts of those resident pupils who were seven years or older by the end of the school year but no older than sixteen at the beginning of the school year, by Regular Education and Special Education classifications, and within these classifications by sex.

The report includes a count of the total number of pupils who transferred during the year to another school within the same school district, and the "number of school days" total used in computing the attendance data.

148. The Pupil Attendance List and the Average Daily Attendance Report are sent to the schools by June 25th.

(PREPARING ATTENDANCE RECORDS, 1966-1967)


IEIC
FROM SCHOOLS (STEP 139)
SCHOOL HEADER
144
KEYPUNCH
NUMBER OF DAYS OF SCHOOL
FROM STEP 143
INFORMA-TION FROM
CARDS
TO STEP 160
FROM STEP 86 (FALL, 1966)
1966-67 PUPIL MASTER FILE
145
D. P.
1966-67 PUPIL MASTER FILE (BASIC-UPDATED)
TO STEP 161
ATTENDANCE AND ENROLLMENT INFORMATION
FROM IEIC FILES FOR SCHOOLS USING ATTENDANCE AND MARK REPORTING SERVICE
ATTENDANCE AND ENROLLMENT INFORMATION
146
D. P.
PUPIL ATTENDANCE LIST
147
D. P.
AVERAGE DAILY ATTENDANCE REPORT
148
SEND
TO SCHOOLS BY JUNE 25th

149. Cards are keypunched for the curriculum information changes that were posted to the Edit List in Step 141.

150. Cards are sorted to District Code, School Code, Local Course Number, and Section Number sequence.

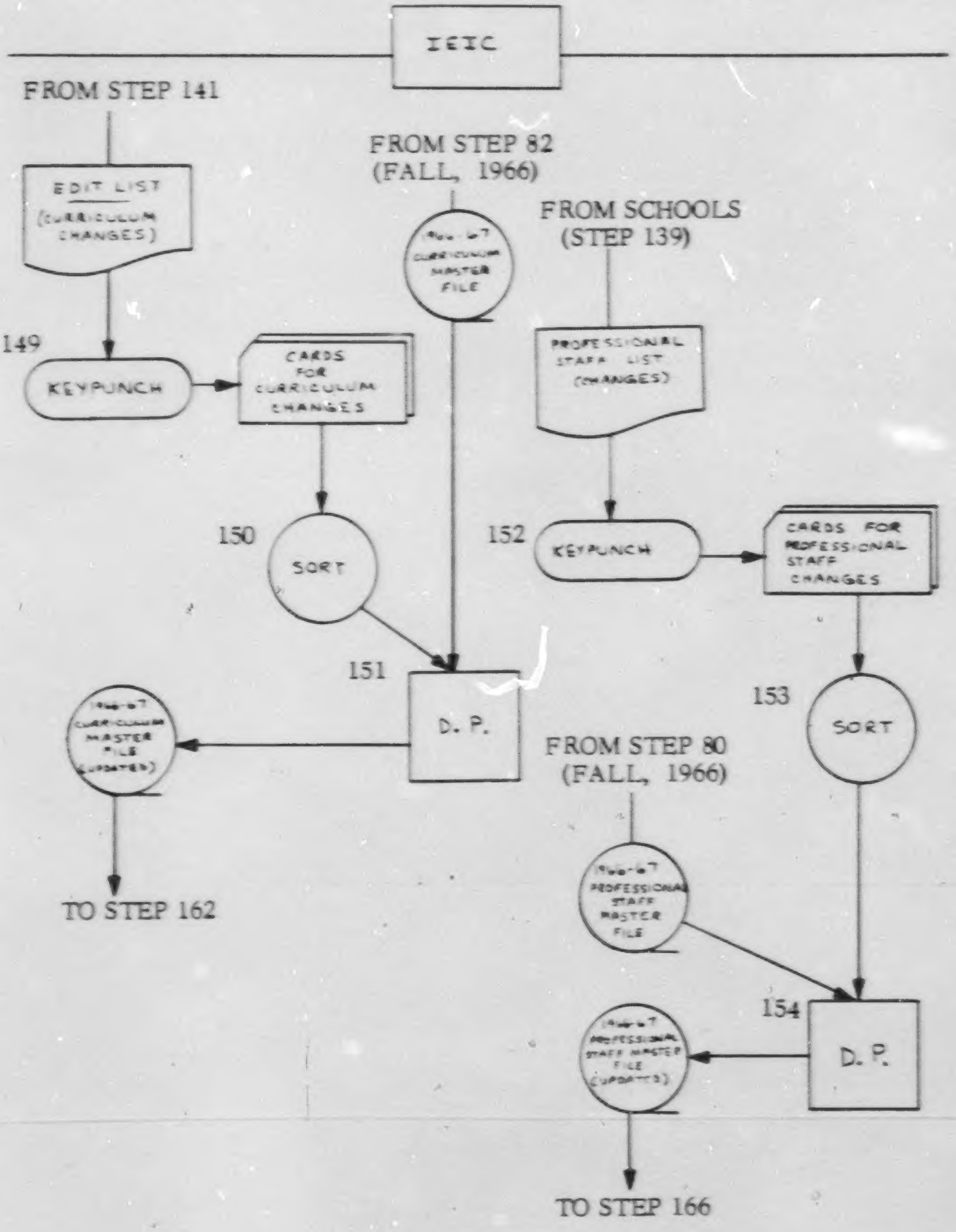
151. The cards containing curriculum information changes are processed with the Curriculum Master File created in the fall of 1966. An updated 1966-1967 Curriculum Master File is produced.

152. Cards are keypunched for the professional staff information changes that were recorded by the schools on their Professional Staff Lists.

153. Cards are sorted to District Code, School Code, and Professional Staff Code sequence.

154. The cards containing professional staff changes are processed with the Professional Staff Master File created in the fall of 1966. An updated 1966-1967 Professional Staff Master File is produced.

(COMPLETING CURRICULUM AND PROFESSIONAL STAFF RECORDS, 1966-1967)


IEIC
FROM STEP 141
EDIT LIST (CURRICULUM CHANGES)
149
KEYPUNCH
CARDS FOR CURRICULUM CHANGES
FROM STEP 82 (FALL, 1966)
1966-67 CURRICULUM MASTER FILE
150
SORT
151
D. P.
1966-67 CURRICULUM MASTER FILE (UPDATED)
TO STEP 162
FROM SCHOOLS (STEP 139)
PROFESSIONAL STAFF LIST (CHANGES)
152
KEYPUNCH
CARDS FOR PROFESSIONAL STAFF CHANGES
153
SORT
FROM STEP 80 (FALL, 1966)
1966-67 PROFESSIONAL STAFF MASTER FILE
154
D. P.
1966-67 PROFESSIONAL STAFF MASTER FILE (UPDATED)
TO STEP 166

155. A tape file of transfer information is created from the Pupil Stencil Cards #1 submitted by the schools in Step 139 for groups of pupils being transferred in the fall of 1967 to other schools within the same school district.

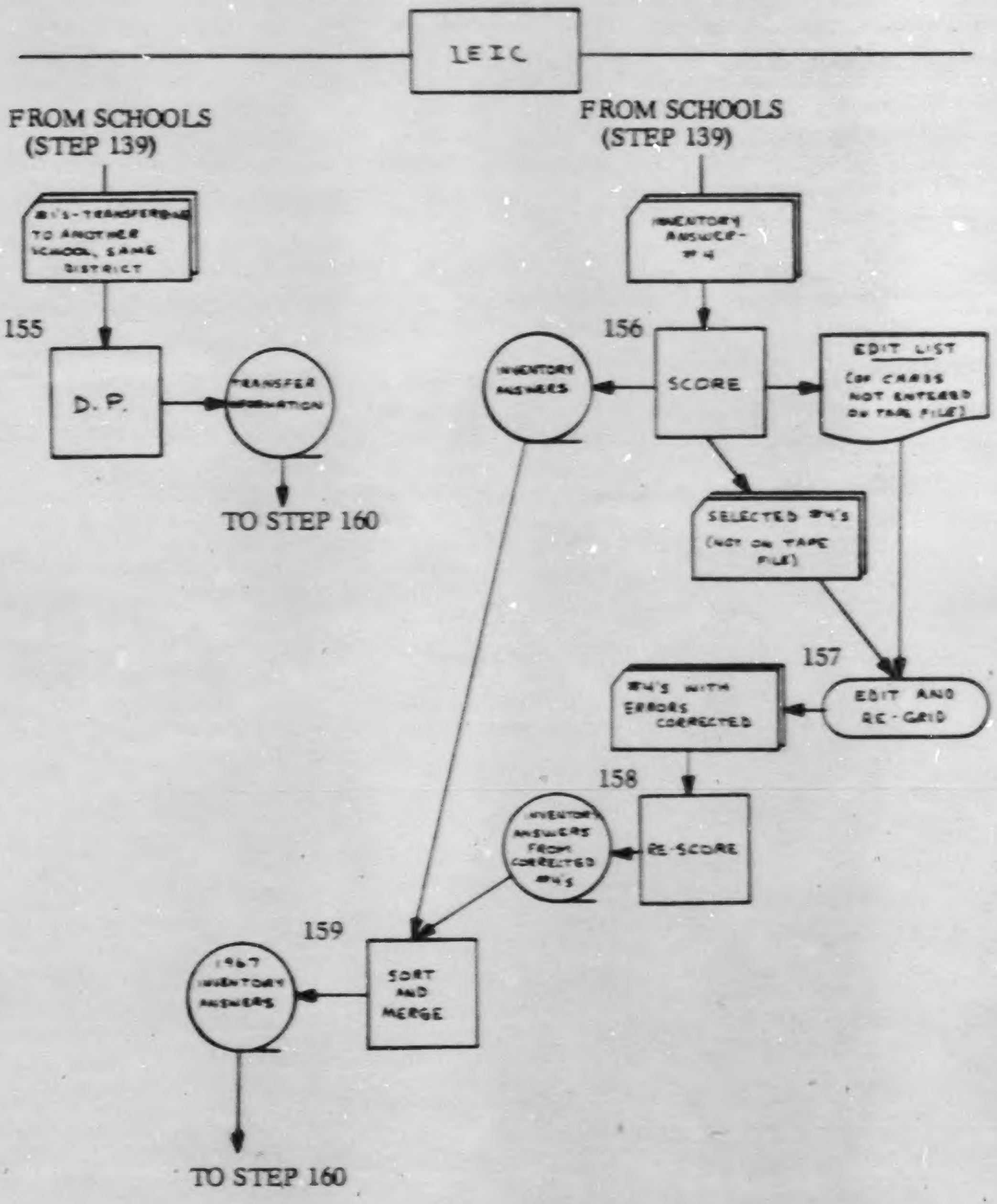
156. The Pupil Answer Cards #4 submitted by the schools in Step 139 are scored and edited by a computer program for suspected errors. Information from cards "passing the edit" is transferred to a tape file. Any cards with suspected errors are selected and identified on an Edit List.

157. Cards with errors are manually corrected by regridding.

158. As cards from Step 157 are rescored, the information is transferred to a tape record.

159. The two tape files of inventory answers (from Steps 156 and 158)are sorted and merged together to produce a single tape file of this information in District Code, School Code, and Pupil Number sequence.

(ENTERING ADDITIONAL RECORDS)


LEIC
FROM SCHOOLS (STEP 139)
#1's - TRANSFERRED TO ANOTHER SCHOOL, SAME DISTRICT
155
D. P.
TRANSFER INFORMATION
TO STEP 160
FROM SCHOOLS (STEP 139)
INVENTORY ANSWER - #4
156
SCORE
INVENTORY ANSWERS
EDIT LIST (OF CARDS NOT ENTERED ON TAPE FILE)
SELECTED #4's (NOT ON TAPE FILE)
157
EDIT AND RE-GRID
#4's WITH ERRORS CORRECTED
158
RE-SCORE
INVENTORY ANSWERS FROM CORRECTED #4's
159
SORT AND MERGE
1967 INVENTORY ANSWERS
TO STEP 160

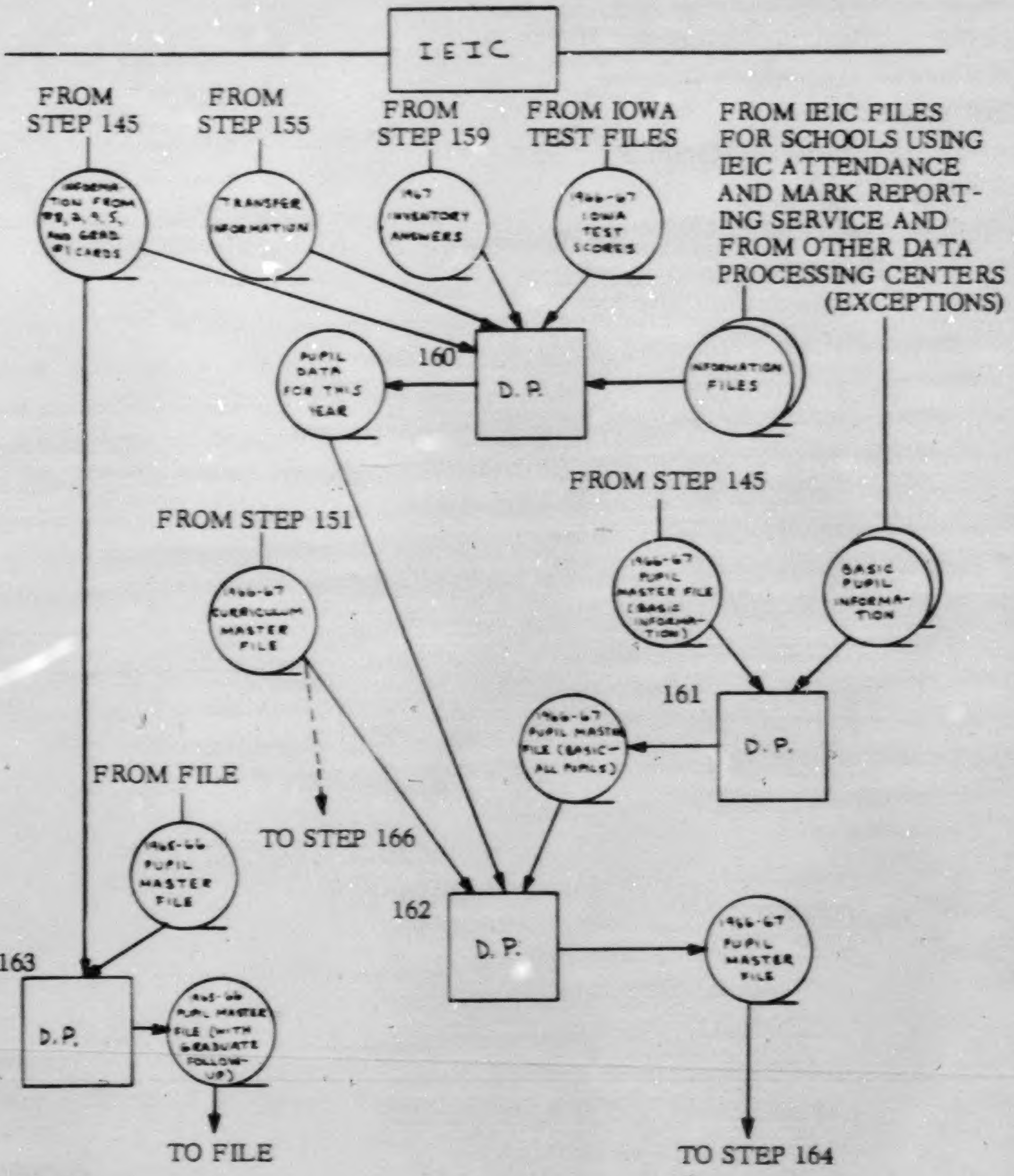
160. The various tape files containing pupil data relative to the 1966-67 school year are sorted and merged to create one tape file of this information. The operation includes merging the same information from schools processed as exceptions. (Schools participating in the IEIC Attendance and Mark Reporting Service and schools with their own data processing installations or using the services of other data processing centers are the "exceptions." The necessary information for these schools is available in semi-processed form.)

161. The partially completed 1966-1967 Pupil Master File, containing updated basic pupil information, is combined with tape files of basic pupil information for schools processed as exceptions to produce a single Pupil Master File of this information for all pupils.

162. The tape file containing pupil data relative to the 1966-1967 school year is combined with the 1966-1967 Pupil Master File of basic pupil information to produce a complete Pupil Master File for the 1966-1967 school year. Each pupil's Mark-Point Average for the school year is computed using data from the Curriculum Master File and is entered on his record in the Pupil Master File. The IEIC Course Numbers are picked up from the Curriculum Master File and added to the course records for each pupil in the Pupil Master File.

163. A new Pupil Master File for the 1965-1966 school year is created to include followup information for the 1966 graduates.

(COMPLETING PUPIL RECORDS, 1966-1967; ADDING GRADUATE FOLLOW-UP INFORMATION TO PUPIL RECORDS, 1965-1966)


IEIC
FROM STEP 145
FROM STEP 155
FROM STEP 159
FROM IOWA TEST FILES
FROM IEIC FILES FOR SCHOOLS USING IEIC ATTENDANCE AND MARK REPORTING SERVICE AND FROM OTHER DATA PROCESSING CENTERS (EXCEPTIONS)
INFORMATION FROM #8, 2, 4, 5, AND GERD. #1 CARDS
TRANSFER INFORMATION
1967 INVENTORY ANSWERS
1966-67 IOWA TEST SCORES
160
D. P.
PUPIL DATA FOR THIS YEAR
INFORMATION FILES
FROM STEP 145
FROM STEP 151
1966-67 CURRICULUM MASTER FILE
1966-67 PUPIL MASTER FILE (BASIC INFORMATION)
BASIC PUPIL INFORMATION
161
D. P.
1966-67 PUPIL MASTER FILE (BASIC-ALL PUPILS)
FROM FILE
TO STEP 166
1965-66 PUPIL MASTER FILE
162
D. P.
1966-67 PUPIL MASTER FILE
163
D. P.
1965-66 PUPIL MASTER FILE (WITH GRADUATE FOLLOW-UP)
TO FILE
TO STEP 164

164. The 1966-1967 Pupil Master File is processed to prepare two copies of an Analysis of Pupil Inventory Responses for each CardPac school. It contains two sections, both of which show the number and percent of the pupils in the school, by grade and in total, who chose each response. The first section also includes comparative statewide percentages by grade and in total. The second section provides comparative percentages by grade and in total of all pupils who attend Iowa schools that are in the same SMSA category (Standard Metropolitan Statistical Area classifications as established by the Federal Bureau of the Census).

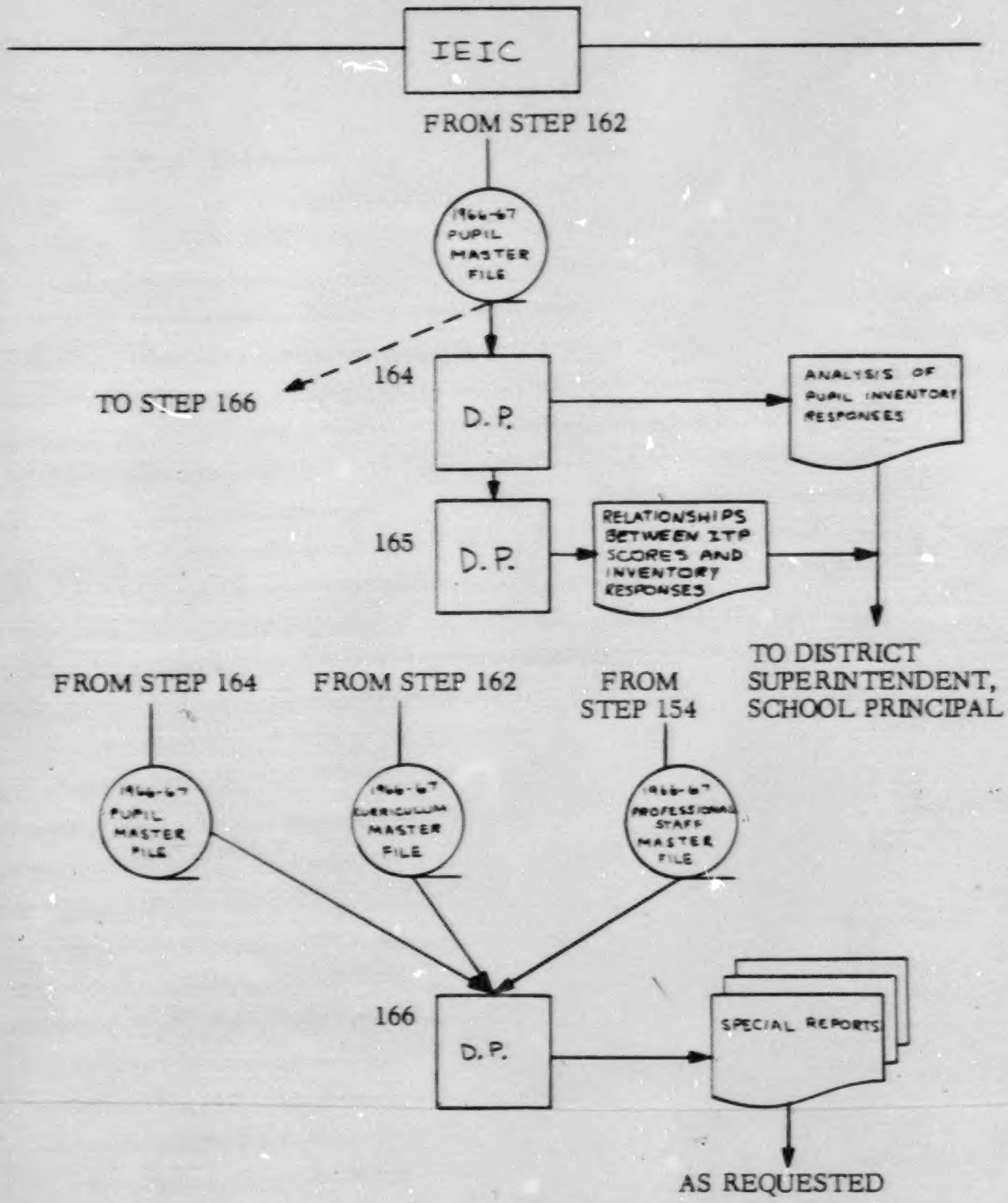
These analyses are sent to the school district superintendent who retains one copy of the analysis for each school. The other copies are distributed to the appropriate principals.

165. Two copies of an individual report are prepared for each CardPac school that administered either the Iowa Tests of Basic Skills or the Iowa Tests of Educational Development during the 1966-1967 school year. Each Relationship Between Iowa Testing Program Composite Score and Pupil Inventory Responses report is an analysis of the school's pupil population by grade. It includes comparative data on all pupils in the state who attend schools in the same SMSA category as well as data summarized for the entire state.

Disposition of these reports is the same as those in Step 164.

166. As part of a data bank of educational information on secondary schools in Iowa, the Pupil Master File, Curriculum Master File and Professional Staff Master File for the 1966-1967 school year are available, within limitations established to protect identity, to individuals and organizations for research and administrative purposes. For such purposes the files are processed to prepare special reports.

(PREPARING PUPIL DATA ANALYSES AND OTHER SPECIAL REPORTS)


IEIC
FROM STEP 162
1966-67 PUPIL MASTER FILE
164
D.P.
TO STEP 166
ANALYSIS OF PUPIL INVENTORY RESPONSES
165
D.P.
RELATIONSHIPS BETWEEN ITP SCORES AND INVENTORY RESPONSES
TO DISTRICT SUPERINTENDENT, SCHOOL PRINCIPAL
FROM STEP 164
FROM STEP 162
FROM STEP 154
1966-67 PUPIL MASTER FILE
1966-67 CURRICULUM MASTER FILE
1966-67 PROFESSIONAL STAFF MASTER FILE
166
D.P.
SPECIAL REPORTS
AS REQUESTED

PHASE VII OUTPUT DOCUMENTS

1. Updated Pupil Attendance List
2. Average Daily Attendance Report

FIGURE 17

UPDATED ATTENDANCE LIST 66-67

ID -0108-101 ALDEN HIGH SCHOOL

STUDENT NAME	ID NUMBER	GRD	ED CL	PRESENT	ABSENT
ABBAS LINDA A	010800001	11	1	175.5	3.5
ANDERSON RUTH E	010800002	11	1	176.5	2.5
BELL BOBBY E	010800003	11	1	177.5	1.5
BESSMAN SUSAN M	010800004	11	1	179.0	.0
BUZZETTI ROBERT C	010800005	11	1	171.5	7.5
CALKINS JAMES M	010800006	11	1	179.0	.0
CATE TYLER C	010800007	11	1	173.5	5.5
CHRISTENSEN LONNIE L	010800008	11	1	175.5	3.5
CLASSON JEAN I	010800009	11	1	176.0	3.0
DANIELS DENNIS L	010800010	11	1	177.5	1.5
ELLINGSON DOUGLAS D	010800011	11	1	178.0	1.0
FENTON CALVIN E	010800012	11	1	176.0	3.0
FLEMING KIRBY L	010800013	11	1	179.0	.0
GALBREATH CURTIS L	010800014	11	1	166.5	12.5
GARDALEN KAREN A	010800015	11	1	177.0	2.0
GARDNER SHIRLEY A	010800016	11	1	168.0	11.0
GILMORE JUDY M	010800017	11	1	178.0	1.0
HARMS GORDON L	010800018	11	1	178.5	.5
HEIDEN LINDA J	010800019	11	1	179.0	.0
HURD ROBERT L	010800021	11	1	171.0	8.0
JASS STEVEN W	010800071	11	1	177.5	1.5
JONDALL PAMELA S	010800022	11	1	172.0	7.0
KALOUS MARLIN D	010800023	11	1	167.0	12.0
KAPPEL MARILYN J	010800024	11	1	178.0	1.0
KLATT BARBARA J	010800025	11	1	176.5	2.5
LAWSON STEVE W	010800026	11	1	156.0	23.0
LETTOW PATRICIA M	010800027	11	1	169.5	9.5
LYON BART J	010800028	11	1	175.0	4.0
MADSEN JENNIFER J	010800029	11	1	172.0	7.0
MARTENS KAREN A	010800319	11	1	176.0	3.0
MEYER MARLYS I	010800030	11	1	172.0	7.0
NANCE DENNIS D	010800031	11	1	177.5	1.5
NELSON LARRY D	010800033	11	1	178.5	.5
PARKER RONALD G	010800035	11	1	179.0	.0
PORTER RITA A	010800037	11	1	168.0	11.0
POTTER MARJEAN P	010800038	11	1	176.5	2.5
RASTETTER MARK A	010800039	11	1	176.5	2.5
SCHNEIDER ROCHELLE R	010800040	11	1	172.0	7.0
SIELAFF RANDALL K	010800041	11	1	171.0	8.0
SMITH SUSANNE A	010800042	11	1	173.0	6.0

FIGURE 18

1966-67 ATTENDANCE REPORT ON -REGULAR EDUCATION, RESIDENT STUDENTS ADEL SENIOR HIGH SCHOOL 10-0027-172 PAGE- 1

	NO.STUDENTS	NO.ABSENCES	AGG.DAYS PRES.	AVG.DAILY ATT.	PCT OF ATT.	AGG.DAYS ENRLD	AVG.DAILY ENRLMNT.
GRADE 07--							
BOYS -	62	258.5	9,690.5	54.14	97.40	9,949.0	55.58
GIRLS -	29	120.5	4,981.5	27.83	97.64	5,102.0	28.50
TOTAL -	91	379.0	14,672.0	81.97	97.48	15,051.0	84.08
GRADE 08--							
BOYS -	41	234.0	7,105.0	39.69	96.81	7,339.0	41.00
GIRLS -	38	240.5	6,437.5	35.96	96.40	6,678.0	37.31
TOTAL -	79	474.5	13,542.5	75.66	96.61	14,017.0	78.31
GRADE 09--							
BOYS -	31	138.0	5,411.0	30.23	97.51	5,549.0	31.00
GIRLS -	39	230.0	6,603.0	36.89	96.63	6,833.0	38.17
TOTAL -	70	368.0	12,014.0	67.12	97.03	12,382.0	69.17
GRADE 10--							
BOYS -	38	257.0	6,545.0	36.56	96.22	6,802.0	38.00
GIRLS -	34	313.0	5,374.0	30.02	94.50	5,687.0	31.77
TOTAL -	72	570.0	11,919.0	66.59	95.44	12,489.0	69.77
GRADE 11--							
BOYS -	38	275.0	6,527.0	36.46	95.96	6,802.0	38.00
GIRLS -	26	254.5	4,322.5	24.15	94.44	4,577.0	25.57
TOTAL -	64	529.5	10,849.5	60.61	95.35	11,379.0	63.57
GRADE 12--							
BOYS -	38	442.0	6,048.0	33.79	93.19	6,490.0	36.26
GIRLS -	16	135.0	2,518.0	14.07	94.91	2,653.0	14.82
TOTAL -	54	577.0	8,566.0	47.85	93.69	9,143.0	51.08

CHAPTER IV

PUPIL INVENTORY ITEM ANALYSIS

Purpose of the Pupil Inventory

The special Pupil Inventory prepared by the Iowa Educational Information Center was administered in spring, 1966, to the public secondary school population in Iowa. Each of the 37 questions in the booklet was designed to gather pupil information that might conceivably contribute to a better understanding of some educational problem.

The "Analysis of Pupil Inventory Responses" shows how the responses (answers) of each school's pupils were distributed, grade by grade, giving the number and the percent of pupils selecting each of the suggested answers to each question. The report also shows the percent of the entire Iowa school population in the same grade that selected the same response.

It is hoped that a study of this report will prove useful to the local school authorities in finding solutions to known problems or in identifying new ones. Perhaps, also, this analysis may stimulate some fresh thinking about possible general improvements in the local educational program. The 1966 Pupil Inventory is a revision of the 1965 Student Questionnaire, enabling administrators to take a two-year look at your student body.

The value of an analysis of this kind clearly depends upon the nature and quality of the items in the Inventory administered. A great deal has yet to be learned about what questions most need to be asked, how they may best be phrased, and how the data collected may best be presented. Each time a report of this kind is prepared, much is learned about how to make the next more useful and more readily interpretable.

A word of caution is necessary concerning the importance of accuracy of source data. These analyses are based on data provided by the local school; therefore, if these data for some reason are inaccurate, the results may be misleading.

The Analysis

In the tables used in the "Analysis of Pupil Inventory Responses," the results of the local administration were printed by grade level in the same sequence as the items appeared in the spring Inventory. Below each item were reproduced the possible responses given in the Inventory. The pupils' answers were summarized to the right of each item.

Only the statewide responses are reproduced here. For each grade level, two columns of figures appear. The "N" column shows the actual number of pupils who chose each of the possible responses to the question. The "PC" column shows what percent of the state's pupils chose each response.

Interpretation of the Report

Opinions may vary as to the most meaningful grouping of the Inventory items for consideration of the results. This will depend, to a great extent, on what comparisons the local school administration is interested in making. In general, however, the contents of the Inventory touch upon four broad areas of information. They are: (1) biography and environment; (2) activities; (3) aspirations and expectations; (4) attitudes, perceptions and personal relationships.

Area 1 Biography and Environment

Includes such characteristics as size of family, parents' occupational and educational level, health, work, study, driving habits, etc.

Item #	Information
1-2	Family background information
3-5	Parents' occupation
6-7	Parents' education
8-9	Pupil time spent in work
10	General health
11	Home study habits
33-34	Auto driving habits

Area 2 Pupil Activities

Item #	In-School Activities
12	Athletics
13	Speech, dramatics
14	Music
15	Publications
16	Student government
17	Service clubs
18	Honor societies
19	Academic clubs
20	Hobbies
21	Social activities

Area 3 Aspirations and Expectations

Includes educational and occupational goals--in terms of both rosy dreams and more realistic probabilities. In considering the response, it is well to remember that the aspirations of a pupil are colored in many instances by the relative "glamor" of the choices offered.

Item #	Goals
25	School academic marks
26-28	Educational goals
29	Occupational goals (girl)

Area 4 Attitudes, Perceptions, and Personal Relationships

Includes the pupil's view of his own standing, his attitudes toward schoolmates, teachers, and schoolwork, and certain pupil-parent relationships affecting study habits.

Item #	Attitudes
22	Pupil relationships
23	Study and homework
24	Teacher relationships
30	Parental attitudes
31-32	Best and least-liked subjects

Item #	Future Plans
35	Finance
36-37	Type and location of school preferred

	GRADE 7		GRADE 8		GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC
01. MARITAL STATUS OF PARENTS														
MARRIED AND LIVING TOGETHER	26061	89	26645	88	34263	88	31808	88	29936	88	26892	87	175605	88
MOTHER NOT LIVING	206	1	246	1	397	1	353	1	426	1	424	1	2052	1
FATHER NOT LIVING	776	3	896	3	1254	3	1281	4	1408	4	1381	4	6996	4
MARRIED BUT NOT LIVING TOGETHER	334	1	288	1	374	1	314	1	265	1	244	1	1819	1
DIVORCED	1508	5	1519	5	1803	5	1646	5	1450	4	1284	4	9210	5
NEITHER PARENT LIVING	46		40		67		68		88		86		395	
CAN'T ANSWER QUESTION	395	1	377	1	467	1	398	1	339	1	311	1	2287	1
NO RESPONSE	98		111		258	1	129		156		135		887	
TOTALS	29424		30122		38883		35997		34068		30757		199251	
02. HEADS OF HOUSE IN WHICH YOU LIVE														
MOTHER AND FATHER	24663	84	25635	85	33153	85	30823	86	29080	85	25915	84	169269	85
MOTHER ONLY	1810	6	1874	6	2266	6	2166	6	2145	6	1933	6	12194	6
FATHER ONLY	410	1	381	1	539	1	449	1	470	1	452	1	2701	1
SOMETIMES MOTHER, SOMETIMES FATHER	653	3	438	1	468	1	396	1	217	1	145		2517	1
MOTHER AND STEPFATHER	869	3	948	3	1119	3	1010	3	905	3	811	3	5662	3
FATHER AND STEPMOTHER	243	1	270	1	357	1	333	1	292	1	257	1	1752	1
GRANDPARENTS, AUNT, UNCLE OR COUSINS	232	1	239	1	383	1	359	1	355	1	346	1	1914	1
BROTHER OR SISTER	26		36		73		65		116		125		441	
FOSTER PARENTS	78		81		118		107		109		121		614	
NONE OF ABOVE	89		92		124		145		228	1	510	2	1188	1
NO RESPONSE	151	1	128		283	1	144		151		142		999	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	
03. FATHER'S OCCUPATION														
CANNOT ANSWER QUESTION	2649	9	2144	7	2345	6	1900	5	1645	5	1342	4	12025	6
FARM WORKER, LABORER, WORKMAN	8000	27	8389	28	11961	31	11097	31	10253	30	8954	29	58654	29
PRIVATE HOUSEHOLD WORKER, HOUSEWIFE	184	1	138		152		114		115		101		804	
CLERK, SALESMAN	1032	4	916	3	956	2	795	2	658	2	580	2	4937	2
SEMI-SKILLED, PROTECTIVE WORKER	3139	11	3241	11	4010	10	3567	10	3369	10	3127	10	20453	10
SERVICE WORKER	1422	5	1467	5	1695	4	1612	4	1480	4	1451	5	9127	5
SKILLED WORKER	3742	13	3931	13	4998	13	4777	13	4416	13	4000	13	25864	13
TECHNICIAN	1098	4	1040	3	997	3	894	2	694	2	542	2	5265	3
MANAGER	1994	7	2318	8	2698	7	2412	7	2266	7	2036	7	13724	7
OFFICIAL	468	2	502	2	596	2	557	2	556	2	503	2	3182	2
PROPRIETOR OR OWNER	3543	12	3866	13	5862	15	6008	17	6449	19	6178	20	31906	16
PROFESSIONAL	1868	6	1957	6	2285	6	2083	6	1984	6	1780	6	11957	6
NO RESPONSE	285	1	213	1	328	1	181	1	183	1	163	1	1353	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	

04. MOTHER'S OCCUPATION

	GRADE 7		GRADE 8		GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC
CANNOT ANSWER QUESTION	2895	10	2571	9	2747	7	2267	6	2075	6	1689	5	14244	7
FARM WORKER, LABORER, WORKMAN	621	2	557	2	685	2	647	2	673	2	558	2	3741	2
PRIVATE HOUSEHOLD WORKER, HOUSEWIFE	18044	61	18735	62	25085	65	23135	64	21779	64	19746	64	126524	63
CLERK, SALESMAN	2567	9	2767	9	3386	9	3350	9	3130	9	2882	9	18082	9
SEMI-SKILLED, PROTECTIVE WORKER	1085	4	1195	4	1529	4	1470	4	1359	4	1352	4	7990	4
SERVICE WORKER	878	3	828	3	1049	3	984	3	1010	3	921	3	5670	3
SKILLED WORKER	627	2	602	2	673	2	611	2	585	2	496	2	3594	2
TECHNICIAN	224	1	181	1	165		177		164		121		1032	1
MANAGER	194	1	228	1	278	1	262	1	270	1	230	1	1462	1
OFFICAL	117		131		145		140		137		137		807	
PROPRIETOR OR OWNER	363	1	390	1	538	1	555	2	559	2	515	2	2920	1
PROFESSIONAL	1430	5	1669	6	2176	6	2133	6	2105	6	1909	6	11422	6
NO RESPONSE	379	1	268	1	427	1	266	1	222	1	201	1	1763	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	

05. MOTHER'S WORK AT PRESENT

	GRADE 7		GRADE 8		GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC
DOES NOT WORK FOR PAY	15570	53	15920	53	21312	55	19397	54	18262	54	16397	53	106858	54
WORKS 10 OR LESS HR PER WEEK FOR PAY	1583	5	1587	5	1870	5	1877	5	1524	4	1233	4	9474	5
WORKS 10-20 HR PER WEEK FOR PAY	1090	4	1348	4	1686	4	1647	5	1526	4	1444	5	8741	4
WORKS 20-30 HR PER WEEK FOR PAY	1239	4	1438	5	1849	5	1792	5	1769	5	1445	5	9532	5
WORKS 30-40 HR PER WEEK FOR PAY	2475	8	3020	10	3907	10	3928	11	3808	11	3510	11	20648	10
WORKS 40 OR MORE HR PER WEEK FOR PAY	3239	11	3312	11	4317	11	4535	13	4584	13	4522	15	24509	12
CAN'T ANSWER QUESTION	3887	13	3247	11	3526	9	2787	8	2377	7	1964	6	17788	9
NO RESPONSE	341	1	250	1	416	1	234	1	218	1	242	1	1701	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	

06. FATHER'S EDUCATION

	GRADE 7		GRADE 8		GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC
NO FORMAL SCHOOLING	109		63		95		78		66		53		464	
SOME ELEMENTARY	529	2	495	2	709	2	837	2	819	2	885	3	4354	2
COMPLETED ELEMENTARY	2403	8	3153	10	5242	13	5261	15	5437	16	5548	18	27044	14
SOME HIGH SCHOOL	4775	16	5491	18	7189	18	6892	19	6382	19	5508	18	36237	18
GRADUATED FROM HIGH SCHOOL	9262	31	9857	33	12705	33	11586	32	10947	32	9778	32	64135	32
SOME BUS. TECH. OR TRADE SCHOOL	835	3	1003	3	1415	4	1436	4	1371	4	1188	4	7248	4
GRADUATED BUS. TECH. OR TRADE SCHOOL	891	3	1018	3	1433	4	1381	4	1237	4	1107	4	7067	4
LESS THAN 2 YRS. COLLEGE	1328	5	1535	5	1928	5	1896	5	1929	6	1708	6	10324	5
MORE THAN 2, LESS THAN 4 YRS. COLLEGE	1519	5	1502	5	1652	4	1554	4	1377	4	1135	4	8739	4
BACHELOR'S DEGREE	1531	5	1829	6	2033	5	1851	5	1666	5	1467	5	10377	5
MASTER'S DEGREE	810	3	824	3	814	2	701	2	685	2	536	2	4370	2
DOCTOR'S DEGREE	545	2	593	2	638	2	577	2	585	2	530	2	3468	2
DON'T KNOW	4604	16	2591	9	2668	7	1798	5	1432	4	1172	4	14265	7
NO RESPONSES	283	1	160	1	282	1	149		135		142		1159	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	

	GRADE 7		GRADE 8		GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC
07. MOTHER'S EDUCATION														
NO FORMAL SCHOOLING	106		89		74		74		65		59		467	
SOME ELEMENTARY	292	1	240	1	299	1	326	1	303	1	299	1	1759	1
COMPLETED ELEMENTARY	1319	4	1649	5	2804	7	2982	8	3007	9	3000	10	14761	7
SOME HIGH SCHOOL	4024	14	4659	15	6142	16	5753	16	5365	16	4737	15	30680	15
GRADUATED FROM HIGH SCHOOL	12532	43	13272	44	16982	44	15565	43	14536	43	13021	42	85908	43
SOME BUS. TECH. OR TRADE SCHOOL	642	2	719	2	1094	3	1054	3	1071	3	999	3	5579	3
GRADUATED BUS. TECH, OR TRADE SCHOOL	792	3	1022	3	1647	4	1570	4	1642	5	1516	5	8189	4
LESS THAN 2 YRS. COLLEGE	1401	5	1563	5	2052	5	1951	5	1867	5	1758	6	10592	5
MORE THAN 2, LESS THAN 4 YRS. COLLEGE	2548	9	2792	9	3353	9	3223	9	3041	9	2718	9	17675	9
BACHELOR'S DEGREE	1348	5	1685	6	1908	5	1826	5	1742	5	1548	5	10057	5
MASTER'S DEGREE	224	1	215	1	230	1	216	1	216	1	160	1	1261	1
DOCTOR'S DEGREE	63		53		41		42		39		28		266	
DON'T KNOW	3862	13	2011	7	1935	5	1265	4	1020	3	775	3	10868	5
NO RESPONSES	271	1	153	1	322	1	150		154		139		1189	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	
08. HOURS PER WEEK WORK FOR PAY														
NONE	12942	44	11076	37	14538	37	13053	36	11533	34	10432	34	73575	37
1 - 5	9063	31	10112	34	12190	31	9752	27	7260	21	5216	17	53593	27
6 - 10	3974	14	4802	16	5983	15	5173	14	4581	13	3709	12	28222	14
11 - 15	1369	5	1876	6	2440	6	2744	8	3288	10	3025	10	14742	7
16 - 20	673	2	849	3	1403	4	2189	6	3033	9	3255	11	11402	6
21 OR MORE	1050	4	1183	4	1905	5	2823	8	4147	12	4918	16	16026	8
NO RESPONSE	353	1	224	1	424	1	263	1	226	1	201	1	1691	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	
09. HOURS PER WEEK WORK FOR NO PAY														
NONE	8049	27	7280	24	9683	25	9206	26	8904	26	8348	27	51470	26
1 - 5	10354	35	10915	36	12787	33	11287	31	10519	31	9533	31	65395	33
6 - 10	4812	16	5198	17	6827	18	6393	18	6143	18	5408	18	34781	17
11 - 15	2126	7	2464	8	3362	9	3187	9	2996	9	2662	9	16797	8
16 - 20	1242	4	1465	5	2034	5	1943	5	1819	5	1605	5	10108	5
21 OR MORE	2397	8	2491	8	3712	10	3631	10	3369	10	2916	9	18516	9
NO RESPONSE	444	2	309	1	478	1	350	1	318	1	285	1	2184	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	
10. PHYSICAL HEALTH														
NO PHYSICAL HANDICAPS	27045	92	28085	93	36240	93	33603	93	31780	93	28515	93	185268	93
LOSS OR RESTRICTED USE OF LIMB	245	1	265	1	359	1	332	1	303	1	355	1	1857	1
DEAFNESS IN AT LEAST ONE EAR	201	1	191	1	239	1	254	1	217	1	191	1	1293	1
BLINDNESS IN AT LEAST ONE EYE	187	1	186	1	225	1	213	1	187	1	155	1	1153	1
ASTHMA, DIABETES OR OTHER PERM AIL.	1360	5	1193	4	1475	4	1381	4	1362	4	1306	4	8077	4
NO RESPONSE	386	1	202	1	345	1	214	1	219	1	237	1	1603	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	

	GRADE 7		GRADE 8		GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC
11. HOURS PER WEEK HOMEWORK OUTSIDE SCHOOL														
NONE	2586	9	2525	8	3515	9	3325	9	3206	9	3274	11	18431	9
1 - 4	15607	53	14783	49	18436	47	15654	43	13852	41	12689	41	91021	46
5 - 9	8196	28	9341	31	11939	31	11538	32	11212	33	9578	31	61804	31
10 - 14	2128	7	2624	9	3691	9	4023	11	4250	12	3721	12	20437	10
15 OR MORE	596	2	675	2	959	2	1256	3	1340	4	1281	4	6107	3
NO RESPONSE	311	1	174	1	343	1	201	1	208	1	214	1	1451	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	
12. PARTICIPATION IN ATHLETICS														
VERY ACTIVE	5058	17	6003	20	6945	18	6026	17	6017	18	5790	19	35839	18
FAIRLY ACTIVE	9281	32	8925	30	11606	30	9232	26	7508	22	5949	19	52501	26
PARTICIPATED LITTLE	2779	9	3088	10	4173	11	3482	10	3313	10	3105	10	19940	10
DIDN'T PARTICIPATE, HAD OPPORTUNITY	4973	17	5960	20	10048	26	11613	32	11844	35	10750	35	55188	28
DIDN'T HAVE ACTIVITY, OR NOT ELIGIBLE	3549	12	3371	11	2880	7	2712	8	2723	8	2670	9	17905	9
CAN'T ANSWER QUESTION	3401	12	2536	8	2894	7	2752	8	2462	7	2297	7	16342	8
NO RESPONSE	383	1	239	1	337	1	180	1	201	1	196	1	1536	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	
13. PARTICIPATION IN SPEECH AND DRAMATICS														
VERY ACTIVE	745	3	954	3	1583	4	1424	4	2429	7	3004	10	10139	5
FAIRLY ACTIVE	2401	8	2342	8	3447	9	3216	9	4628	14	4741	15	20775	10
PARTICIPATED LITTLE	2083	7	2010	7	2795	7	2513	7	2939	9	2879	9	15219	8
DIDN'T PARTICIPATE, HAD OPPORTUNITY	5392	18	6891	23	18217	47	21718	60	19778	58	16650	54	88646	44
DIDN'T HAVE ACTIVITY, OR NOT ELIGIBLE	13498	46	14150	47	8371	22	3443	10	1427	4	1070	3	41959	21
CAN'T ANSWER QUESTION	4828	16	3500	12	4048	10	3436	10	2643	8	2184	7	20639	10
NO RESPONSE	477	2	275	1	422	1	247	1	224	1	229	1	1874	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	
14. PARTICIPATION IN MUSIC														
VERY ACTIVE	6078	21	6864	23	8124	21	6529	18	6652	20	6369	21	40616	20
FAIRLY ACTIVE	6267	21	6248	21	8463	22	7116	20	5755	17	4466	15	38315	19
PARTICIPATED LITTLE	1451	5	1404	5	1337	3	1111	3	1136	3	1187	4	7626	4
DIDN'T PARTICIPATE, HAD OPPORTUNITY	9451	32	10844	36	16117	41	16799	47	16579	49	15336	50	85126	43
DIDN'T HAVE ACTIVITY, OR NOT ELIGIBLE	2155	7	1835	6	1543	4	1421	4	1333	4	1130	4	9417	5
CAN'T ANSWER QUESTION	3567	12	2654	9	2884	7	2781	8	2308	7	2054	7	16328	8
NO RESPONSE	455	2	273	1	415	1	240	1	225	1	215	1	1823	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	

	GRADE 7		GRADE 8		GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC
15. PARTICIPATION IN PUBLICATIONS														
VERY ACTIVE	492	2	747	2	955	2	753	2	1745	5	3340	11	8032	4
FAIRLY ACTIVE	1290	4	1509	5	1716	4	1595	4	2372	7	3712	12	12194	6
PARTICIPATED LITTLE	1262	4	1318	4	1597	4	1350	4	1719	5	2120	7	9366	5
DIDN'T PARTICIPATE, HAD OPPORTUNITY	6543	22	8732	29	17991	46	21107	59	20844	61	17062	55	92279	46
DIDN'T HAVE ACTIVITY, OR NOT ELIGIBLE	13685	47	13549	45	11432	29	6663	19	3802	11	1775	6	50906	26
CAN'T ANSWER QUESTION	5716	19	4040	13	4859	12	4328	12	3385	10	2572	8	24900	12
NO RESPONSE	436	1	227	1	333	1	201	1	201	1	176	1	1574	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	
16. PARTICIPATION IN STUDENT GOVERNMENT														
VERY ACTIVE	1269	4	1310	4	1687	4	1200	3	1541	5	1931	6	8938	4
FAIRLY ACTIVE	1253	4	1277	4	1405	4	1196	3	1249	4	1334	4	7714	4
PARTICIPATED LITTLE	847	3	1011	3	1206	3	927	3	1177	3	1220	4	6388	3
DIDN'T PARTICIPATE, HAD OPPORTUNITY	9075	31	10717	36	17709	46	18848	52	18005	53	16282	53	90636	45
DIDN'T HAVE ACTIVITY, OR NOT ELIGIBLE	9908	34	10332	34	10032	26	7729	21	6741	20	5565	18	50307	25
CAN'T ANSWER QUESTION	6586	22	5189	17	6403	16	5833	16	5089	15	4167	14	33267	17
NO RESPONSE	486	2	286	1	441	1	264	1	266	1	258	1	2001	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	
17. PARTICIPATION IN SERVICE CLUBS														
VERY ACTIVE	2211	8	2177	7	3932	10	4115	11	4736	14	4439	14	21610	11
FAIRLY ACTIVE	2482	8	2583	9	6711	17	6583	18	5950	17	5253	17	29562	15
PARTICIPATED LITTLE	1033	4	1188	4	1896	5	1913	5	2079	6	2160	7	10269	5
DIDN'T PARTICIPATE, HAD OPPORTUNITY	5371	18	6764	22	12643	33	14286	40	13075	38	11268	37	63407	32
DIDN'T HAVE ACTIVITY, OR NOT ELIGIBLE	12932	44	13571	45	9625	25	5658	16	5317	16	5250	17	52353	26
CAN'T ANSWER QUESTION	4875	17	3524	12	3630	9	3164	9	2667	8	2161	7	20021	10
NO RESPONSE	520	2	315	1	446	1	278	1	244	1	226	1	2029	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	
18. PARTICIPATION IN HONOR SOCIETIES														
VERY ACTIVE	321	1	339	1	321	1	394	1	1187	3	1917	6	4479	2
FAIRLY ACTIVE	662	2	597	2	561	1	676	2	1189	3	1385	5	5070	3
PARTICIPATED LITTLE	621	2	655	2	723	2	553	2	633	2	610	2	3795	2
DIDN'T PARTICIPATE, HAD OPPORTUNITY	3105	11	4108	14	8126	21	11498	32	11680	34	10805	35	49322	25
DIDN'T HAVE ACTIVITY, OR NOT ELIGIBLE	17275	59	19080	63	22239	57	16759	47	14162	42	11772	38	101287	51
CAN'T ANSWER QUESTION	6856	23	5004	17	6376	16	5786	16	4919	14	3988	13	32929	17
NO RESPONSE	584	2	339	1	537	1	331	1	298	1	280	1	2369	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	

	GRADE 7		GRADE 8		GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC
19. PARTICIPATION IN ACADEMIC CLUBS														
VERY ACTIVE	967	3	899	3	1426	4	962	3	1089	3	1073	3	6416	3
FAIRLY ACTIVE	2051	7	1712	6	3050	8	2486	7	2159	6	1751	6	13209	7
PARTICIPATED LITTLE	759	3	840	3	1301	3	1253	3	1339	4	1268	4	6760	3
DIDN'T PARTICIPATE, HAD OPPORTUNITY	3816	13	5385	18	11271	29	14552	40	14203	42	12811	42	62038	31
DIDN'T HAVE ACTIVITY, OR NOT ELIGIBLE	16052	55	17117	57	16809	43	12275	34	11498	34	10653	35	84404	42
CAN'T ANSWER QUESTION	5170	18	3826	13	4515	12	4159	12	3505	10	2946	10	24121	12
NO RESPONSE	609	2	343	1	511	1	310	1	275	1	255	1	2303	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	
20. PARTICIPATION IN HOBBY CLUBS OR ACTIVITIES														
VERY ACTIVE	2352	8	1803	6	1892	5	1136	3	1123	3	1098	4	9404	5
FAIRLY ACTIVE	3412	12	2821	9	3103	8	2291	6	2009	6	1673	5	15309	8
PARTICIPATED LITTLE	1372	5	1386	5	1688	4	1342	4	1411	4	1279	4	8478	4
DIDN'T PARTICIPATE, HAD OPPORTUNITY	4291	15	5250	17	9268	24	11888	33	11296	33	10108	33	52101	26
DIDN'T HAVE ACTIVITY, OR NOT ELIGIBLE	13393	46	15489	51	18407	47	15285	42	14946	44	13772	45	91292	46
CAN'T ANSWER QUESTION	4054	14	3026	10	3994	10	3744	10	2995	9	2538	8	20351	10
NO RESPONSE	550	2	347	1	531	1	311	1	288	1	289	1	2316	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	
21. PARTICIPATION IN SOCIAL ACTIVITIES														
VERY ACTIVE	6132	21	6927	23	8042	21	6640	19	7373	22	6779	22	42093	21
FAIRLY ACTIVE	8639	29	9570	32	14178	36	13209	37	13245	39	11906	39	70747	36
PARTICIPATED LITTLE	3661	12	4091	14	6742	17	6779	19	6343	19	5903	19	33519	17
DIDN'T PARTICIPATE, HAD OPPORTUNITY	4189	14	4325	14	6216	16	6348	18	4996	15	4201	14	30275	15
DIDN'T HAVE ACTIVITY, OR NOT ELIGIBLE	3785	13	3169	11	1435	4	823	2	583	2	606	2	10401	5
CAN'T ANSWER QUESTION	2495	8	1760	6	1830	5	1727	5	1288	4	1119	4	10219	5
NO RESPONSE	523	2	280	1	440	1	271	1	240	1	243	1	1997	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	
22. UNPLEASANT EXPERIENCES WITH OTHER STUDENTS														
A GREAT MANY	1015	3	853	3	807	2	622	2	511	1	422	1	4230	2
QUITE A FEW	2381	8	2120	7	2256	6	1638	5	1315	4	993	3	10703	5
NOT VERY MANY	8303	28	7927	26	9694	25	7888	22	7137	21	6294	20	47243	24
VERY FEW	12699	43	14099	47	18668	48	17977	50	17451	51	16592	54	97486	49
NONE	4609	16	4838	16	7003	18	7564	21	7393	22	6155	20	37562	19
NO RESPONSE	417	1	285	1	455	1	308	1	261	1	301	1	2027	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	

	GRADE 7 N	GRADE 7 PC	GRADE 8 N	GRADE 8 PC	GRADE 9 N	GRADE 9 PC	GRADE 10 N	GRADE 10 PC	GRADE 11 N	GRADE 11 PC	GRADE 12 N	GRADE 12 PC	TOTAL N	TOTAL PC
23. GENERAL ATTITUDE TO STUDYING														
I REALLY LIKE IT	1098	4	926	3	1072	3	790	2	881	3	918	3	5665	3
I LIKE IT MOST OF THE TIME	7633	26	7726	26	9739	25	8791	24	9112	27	9078	30	52079	26
CAN'T SAY I LIKE OR DISLIKE IT	16811	57	17272	57	22406	58	20161	56	18044	53	15875	52	110569	55
I DISLIKE IT MOST OF THE TIME	2580	9	2890	10	4002	10	4608	13	4421	13	3566	12	22067	11
I DISLIKE IT VERY MUCH	960	3	1116	4	1320	3	1409	4	1359	4	1054	3	7218	4
NO RESPONSE	342	1	192	1	344	1	238	1	251	1	266	1	1633	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	
24. HOW DO TEACHERS VIEW YOU														
AS A TOP PUPIL	1502	5	1650	5	1988	5	1782	5	1925	6	2123	7	10970	6
A GOOD PUPIL	8319	28	9158	30	11411	29	10247	28	10659	31	10318	34	60112	30
AN AVERAGE PUPIL	16014	54	16007	53	21507	55	19751	55	17849	52	15651	51	106779	54
A BELOW AVERAGE PUPIL	2465	8	2458	8	2844	7	3202	9	2670	8	1877	6	15516	8
A VERY POOR PUPIL	521	2	424	1	479	1	501	1	448	1	273	1	2646	1
NO RESPONSE	603	2	425	1	654	2	514	1	517	2	515	2	3228	2
TOTALS	29424		30122		38883		35997		34068		30757		199251	
25. IF IN SCHOOL NEXT YEAR WILL PROBABLY														
GET VERY LOW GRADES	838	3	801	3	838	2	724	2	573	2	915	3	4689	2
GET BELOW AVERAGE GRADES	2663	9	2597	9	3447	9	3307	9	2971	9	2739	9	17724	9
GET AVERAGE GRADES	13608	46	13889	46	18473	48	16493	46	14811	43	15964	52	93238	47
GET ABOVE AVERAGE GRADES	9805	33	10480	35	13114	34	12599	35	12569	37	8814	29	67381	34
GET QUITE HIGH GRADES	1949	7	1965	7	2412	6	2386	7	2627	8	959	3	12298	6
NO RESPONSE	561	2	390	1	599	2	488	1	517	2	1366	4	3921	2
TOTALS	29424		30122		38883		35997		34068		30757		199251	
26. EDUCATIONAL ASPIRATIONS														
LESS THAN HIGH SCHOOL GRADUATION	561	2	368	1	297	1	229	1	145		78		1678	1
HIGH SCHOOL GRADUATION	4162	14	3953	13	4409	11	3470	10	2554	7	1404	5	19952	10
ON THE JOB TRAINING	1838	6	1934	6	2751	7	2446	7	2157	6	2423	8	13549	7
GO TO SCHOOL IN MILITARY SERVICE	2315	8	1958	7	2497	6	2221	6	2012	6	1415	5	12418	6
TECH. TRADE OR BUS. SCH-2YRS OR LESS	1761	6	2491	8	4527	12	4991	14	5085	15	4288	14	23143	12
TECH. TRADE OR BUS. SCH-MORE 2 YRS	1627	6	1664	6	2475	6	2375	7	2150	6	1752	6	12043	6
SOME COLLEGE, NOT GRADUATE	1164	4	929	3	994	3	904	3	701	2	527	2	5219	3
COMPLETE JUNIOR COLLEGE	3307	11	2969	10	3723	10	3293	9	3101	9	2534	8	18928	9
BACHELOR'S DEGREE	7733	26	8705	29	11127	29	10354	29	10115	30	9664	31	57698	29
BEYOND A BACHELOR'S DEGREE	4196	14	4763	16	5587	14	5425	15	5767	17	6352	21	32090	16
NO RESPONSE	760	3	388	1	496	1	289	1	281	1	319	1	2533	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	

27. EDUCATIONAL EXPECTATIONS

	GRADE 7		GRADE 8		GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC
LESS THAN HIGH SCHOOL GRADUATION	476	2	341	1	312	1	241	1	189	1	180	1	1739	1
HIGH SCHOOL GRADUATION	4389	15	4661	15	5801	15	5221	15	4401	13	3429	11	27902	14
ON THE JOB TRAINING	1873	6	1813	6	2506	6	2287	6	2212	6	2746	9	13437	7
GO TO SCHOOL IN MILITARY SERVICE	1779	6	1626	5	2330	6	2179	6	2116	6	1758	6	11788	6
TECH. TRADE, BUS. SCH-2 YRS OR LESS	1891	6	2722	9	4895	13	5449	15	5502	16	4681	15	25140	13
TECH. TRADE, BUS. SCH-MORE 2 YRS.	1702	6	1822	6	2619	7	2428	7	2118	6	1630	5	12319	6
SOME COLLEGE, NOT GRADUATE	1548	5	1348	4	1511	4	1353	4	1284	4	959	3	8003	4
COMPLETE JUNIOR COLLEGE	3718	13	3319	11	3984	10	3380	9	3081	9	2321	8	19803	10
BACHELOR'S DEGREE	8001	27	8767	29	10985	28	10195	28	9985	29	9506	31	57439	29
BEYOND A BACHELOR'S DEGREE	3059	10	3179	11	3284	8	2857	8	2798	8	3140	10	18317	9
NO RESPONSE	988	3	524	2	656	2	407	1	382	1	407	1	3364	2
TOTALS	29424		30122		38883		35997		34068		30757		199251	

28. ASPIRATION-EXPECTATION DIFFERENCE IN EDUCATION

	GRADE 7		GRADE 8		GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC
ANSWERED BOTH QUEST THE SAME	17311	59	19011	63	24381	63	22119	61	20356	60	17500	57	120678	61
PARENTS WANT ME TO CONTINUE	3259	11	2421	8	2517	6	2070	6	1429	4	930	3	12626	6
FINANCIAL DIFFICULTY	2170	7	2761	9	4223	11	4359	12	4494	13	4007	13	22014	11
FAMILY RESPONSIBILITIES	631	2	649	2	852	2	865	2	831	2	1071	3	4899	2
RATHER GET MARRIED OR WORK	1443	5	1210	4	1668	4	1757	5	2167	6	2600	8	10845	5
DON'T WANT TO ADVANCE OVER SECOND QUE	1471	5	1594	5	2282	6	2347	7	2382	7	2315	8	12391	6
EXPECT TO GO IN ARMED FORCES	1839	6	1609	5	1907	5	1742	5	1710	5	1541	5	10348	5
NO RESPONSE	1300	4	867	3	1053	3	738	2	699	2	793	3	5450	3
TOTALS	29424		30122		38883		35997		34068		30757		199251	

29. FUTURE VOCATION—GIRLS

	GRADE 7		GRADE 8		GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC
LIFETIME CAREER OTHER THAN HOMEMAKER	2071	14	2035	14	2250	11	1906	11	1688	10	1543	10	11493	12
CAREER, THEN BOTH CAREER + HOMEMAKER	4172	28	5017	33	6987	36	6525	36	6131	37	5727	38	34559	35
CAREER FOR AWHILE, THEN HOMEMAKER	3419	23	4166	28	6409	33	6576	36	6366	38	5575	37	32511	33
BOTH CAREER AND HOMEMAKER	2803	19	2255	15	2259	12	1666	9	1396	8	1287	9	11666	12
HOMEMAKER	1609	11	1096	7	1057	5	938	5	928	6	743	5	6371	6
NO RESPONSE	741	5	430	3	637	3	467	3	272	2	221	1	2768	3
TOTALS	14815		14999		19599		18078		16781		15096		99368	

30. PARENTAL ATTITUDE TOWARD HOMEWORK ASSIGNED

	GRADE 7		GRADE 8		GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL	
	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC	N	PC
PROBABLY DONT CARE ONE WAY OR OTHER	7935	27	8386	28	13134	34	13047	36	14046	41	13798	45	70346	35
FEEL TEACHERS GIVE TOO MUCH	3206	11	3975	13	4783	12	5117	14	4869	14	3867	13	25817	13
FEEL TEACHERS GIVE ABOUT RIGHT AMT.	14868	51	14683	49	17472	45	14844	41	12603	37	10562	34	85032	43
FEEL TEACHERS GIVE TOO LITTLE	2369	8	2294	8	2481	6	2073	6	1646	5	1594	5	12457	6
NO RESPONSE	1046	4	784	3	1013	3	916	3	904	3	936	3	5599	3
TOTALS	29424		30122		38883		35997		34068		30757		199251	

	GRADE 7 N	GRADE 7 PC	GRADE 8 N	GRADE 8 PC	GRADE 9 N	GRADE 9 PC	GRADE 10 N	GRADE 10 PC	GRADE 11 N	GRADE 11 PC	GRADE 12 N	GRADE 12 PC	TOTAL N	TOTAL PC
31. BEST LIKED SUBJECTS														
MATHEMATICS	4709	16	4963	16	7031	18	5390	15	4855	14	4274	14	31222	16
ENGLISH	3233	11	3448	11	5217	13	4816	13	4530	13	3847	13	25091	13
SOCIAL STUDIES	3232	11	3892	13	3095	8	3720	10	3992	12	3243	11	21174	11
SCIENCES	4292	15	4096	14	5549	14	5217	14	3814	11	3333	11	26301	13
FOREIGN LANGUAGES	486	2	577	2	1164	3	1030	3	843	2	699	2	4799	2
MUSIC	2135	7	2089	7	2812	7	2624	7	2218	7	1891	6	13769	7
INDUSTRIAL ARTS	2767	9	3738	12	6137	16	5407	15	5289	16	4707	15	28045	14
ART	2799	10	2229	7	2084	5	1964	5	1844	5	1766	6	12686	6
BUSINESS EDUCATION	160	1	179	1	606	2	1431	4	2994	9	4005	13	9375	5
PHYSICAL EDUCATION	4852	16	4466	15	4614	12	3972	11	3324	10	2621	9	23849	12
NO RESPONSE	759	3	445	1	574	1	426	1	365	1	371	1	2940	1
TOTALS	29424		30122		38883		35997		34068		30757		199251	
32. LEAST LIKED SUBJECTS														
MATHEMATICS	7108	24	7257	24	8996	23	9287	26	8435	25	7530	24	48613	24
ENGLISH	4662	16	4972	17	6731	17	6063	17	6051	18	5704	19	34183	17
SOCIAL STUDIES	5203	18	4902	16	5389	14	6240	17	6274	18	5196	17	33204	17
SCIENCES	3743	13	4196	14	6213	16	4590	13	4273	13	3989	13	27004	14
FOREIGN LANGUAGES	1709	6	2059	7	3826	10	3694	10	3225	9	2983	10	17496	9
MUSIC	2538	9	2138	7	1911	5	1543	4	1315	4	1205	4	10650	5
INDUSTRIAL ARTS	585	2	1012	3	1552	4	1209	3	1170	3	961	3	6489	3
ART	1688	6	1724	6	1718	4	1293	4	1182	3	916	3	8521	4
BUSINESS EDUCATION	413	1	348	1	588	2	650	2	839	2	899	3	3737	2
PHYSICAL EDUCATION	773	3	874	3	1174	3	847	2	799	2	846	3	5313	3
NO RESPONSE	1002	3	640	2	785	2	581	2	505	1	528	2	4041	2
TOTALS	29424		30122		38883		35997		34068		30757		199251	
33. DO YOU HAVE CAR OF YOUR OWN														
YES	835	3	1100	4	2098	5	4945	14	9241	27	11329	37	29548	15
NO	27592	94	28418	94	36064	93	30401	84	24265	71	18843	61	165583	83
NO RESPONSE	997	3	604	2	721	2	651	2	562	2	585	2	4120	2
TOTALS	29424		30122		38883		35997		34068		30757		199251	
34. FREQUENCY OF DRIVING PARENTS CAR														
NEVER	25253	86	23436	78	23938	62	12817	36	7217	21	6701	22	99362	50
ONCE A WEEK OR LESS	1976	7	3155	10	5687	15	6707	19	6697	20	6685	22	30907	16
TWICE A WEEK	393	1	872	3	2216	6	4145	12	4132	12	3275	11	15033	8
THREE TIMES A WEEK	309	1	662	2	1930	5	3569	10	3906	11	3102	10	13478	7
FOUR TIMES A WEEK	143		383	1	1029	3	2153	6	2489	7	1979	6	8176	4
FIVE OR MORE TIMES A WEEK	452	2	1105	4	3458	9	6067	17	9176	27	8563	28	28821	14
NO RESPONSE	898	3	509	2	625	2	539	1	451	1	452	1	3474	2
TOTALS	29424		30122		38883		35997		34068		30757		199251	

	GRADE 7 N	GRADE 7 PC	GRADE 8 N	GRADE 8 PC	GRADE 9 N	GRADE 9 PC	GRADE 10 N	GRADE 10 PC	GRADE 11 N	GRADE 11 PC	GRADE 12 N	GRADE 12 PC	TOTAL N	TOTAL PC
35. PLANS TO FINANCE EDUCATION BEYOND HIGH SCHOOL														
PARENTS,SCHOLARSHIP,GRANT,SAV.,ETC.	6243	21	6534	22	7794	20	7226	20	6942	20	7037	23	41776	21
WORK OR BORROW PART OF MONEY	6393	22	8699	29	12789	33	12385	34	12262	36	11095	36	63623	32
WORK OR BORROW ALL OF MONEY	1210	4	1418	5	2436	6	3125	9	3769	11	4108	13	16066	8
DON'T KNOW AT THIS TIME	11340	39	9456	31	10507	27	8005	22	5927	17	2784	9	48019	24
DON'T PLAN TO CONTINUE EDUCATION	2947	10	3162	10	4311	11	4342	12	4368	13	4943	16	24073	12
NO RESPONSE	1291	4	853	3	1046	3	914	3	800	2	790	3	5694	3
TOTALS	29424		30122		38883		35997		34068		30757		199251	
36. TYPE OF SCHOOL EXPECT TO ATTEND THIS FALL OR LATER														
COLLEGE	972	3	861	3	917	2	1057	3	1732	5	9937	32	15476	8
JUNIOR COLLEGE	642	2	421	1	490	1	488	1	1027	3	4985	16	8053	4
TECHNICAL SCHOOL	196	1	160	1	312	1	265	1	352	1	1016	3	2301	1
TRADE SCHOOL	189	1	289	1	502	1	538	1	726	2	1966	6	4210	2
REGISTERED NURSING LESS THAN B. S.	143		122		174		174		249	1	660	2	1522	1
APPRENTICESHIP TRAINING PROGRAM	40		39		52		54		79		289	1	553	
BUSINESS SCHOOL	110		182	1	376	1	448	1	712	2	2054	7	3882	2
HEALTH SERVICES	78		79		88		101		158		526	2	1030	1
MILITARY SERVICE SCHOOL	187	1	143		221	1	201	1	302	1	1419	5	2473	1
CORRESPONDENCE TRAINING	102		116		112		108		119		143		700	
BE IN SAME SCHOOL SYSTEM	24027	82	24776	82	29068	75	30231	84	26410	78	171	1	134683	68
BE IN DIFF. BUT SIMILAR SCHOOL	1217	4	1844	6	5165	13	1008	3	697	2	76		10027	5
DON'T EXPECT TO ATTEND ANY SCHOOL	262	1	320	1	408	1	506	1	844	2	6821	22	9161	5
NO RESPONSE	1259	4	770	3	978	3	818	2	661	2	694	2	5180	3
TOTALS	29424		30122		38883		35997		34068		30757		199251	
37. WHERE DO YOU EXPECT TO GO TO SCHOOL														
DO NOT EXPECT TO GO TO SCHOOL	3396	12	3738	12	5073	13	4978	14	4958	15	5551	18	27694	14
HOMETOWN OR NEAR SO CAN LIVE AT HOME	2742	9	3005	10	3807	10	3689	10	3994	12	4726	15	21963	11
IOWA BUT AWAY FROM HOME	4591	16	5841	19	8997	23	9201	26	10845	32	10822	35	50297	25
OUTSIDE IOWA BUT IN MIDWESTERN STATE	1210	4	1457	5	2191	6	2515	7	3074	9	4078	13	14525	7
IN A NORTHEASTERN STATE	439	1	500	2	530	1	483	1	350	1	327	1	2629	1
IN A SOUTHEASTERN STATE	228	1	221	1	226	1	226	1	228	1	210	1	1339	1
IN A NORTHWESTERN STATE	310	1	335	1	421	1	416	1	308	1	245	1	2035	1
IN A SOUTHWESTERN STATE	538	2	680	2	775	2	705	2	556	2	493	2	3747	2
OUTSIDE THE UNITED STATES	177	1	180	1	211	1	191	1	144		177	1	1080	1
I DO NOT KNOW YET	14402	49	13225	44	15531	40	12521	35	8711	26	3056	10	67446	34
NO RESPONSE	1391	5	940	3	1121	3	1072	3	900	3	1072	3	6496	3
TOTALS	29424		30122		38883		35997		34068		30757		199251	

V

RELATIONSHIPS OF CERTAIN VARIABLES ON THE CARDPAC PUPIL INVENTORY AND OTHER PUPIL DATA

The Nature of the Comments

The comments in this report were prepared to guide the administrator in his interpretation as to how pupil responses (answers) to selected items in the CardPac Pupil Inventory are related to academic achievement or to pupil responses on other items in the same Inventory. These state and local summaries were compiled from pupil responses to the spring, 1966, administration of the Inventory in Iowa's public secondary schools and from Iowa test scores and school marks on record at the Iowa Educational Information Center.

Nine variables were selected for special examination in this report. They are:

(1) Mark-Point Average achieved by a pupil.

(2) A pupil's composite score on either the Iowa Tests of Basic Skills or the Iowa Tests of Educational Development.

(3) The level of education received by the mother.

(4) The occupational level of the father.

(5) The number of hours per week a pupil works.

(6) The amount of time a pupil devotes to homework.

(7) The number of unpleasant experiences a pupil encounters.

(8) The manner in which a pupil thinks his teacher views him.

(9) The expectation level of a pupil regarding post high school education.

These variables are related to each other in a series of tables. Along with each table are comments concerning the interpretation of results found in the table. The above variables were selected on the basis of:

(1) The contribution that a given relationship would make to understanding either the uniqueness or commonality of pupils.

(2) The contribution a given piece of information would provide in predicting pupil behavior.

(3) The contribution an item or table might give to a school to aid school personnel in determining how their student body compares with the total Iowa pupil population.

Several of the tables presented include the important school variable called Mark-Point Average. Mark-Point Averages were determined much as a college Mark-Point Average. That is,

$$\text{M.P.A.} = \frac{[\text{Sum of the (mark times course credit) units}]}{\text{the number of course credits}}$$

In the majority of schools this was accomplished by assigning letter marks as follows: A = 4.0, B = 3.0, C = 2.0, D = 1.0, and F = 0.0. Course credits were determined by the number of Carnegie credits offered for a given course. If a school did not report the marks earned by its pupils through the CardPac System of Educational Accounting, the school, of course, received no analysis of its data. In addition, reports were not constructed where Iowa Testing Program scores or CardPac Inventory responses were unavailable.

Organization of the Report

Analyses were made for each grade in each building or reporting unit of a school district. In addition, a statewide analysis was produced for each grade level. (Only the statewide analysis is reproduced here.) The school administrator was able to make direct comparisons between his building and state totals. Comments to aid in interpreting tabled results immediately precede the referenced tables. No attempt was made to individually interpret each school's results.

How to Read the Tables

Tables 1 through 4 each present data in a similar manner. These tables each contain data on two variables. The variables in question are noted toward the top of the table. For example, Table 1 is concerned with M.P.A. and I.T.P. composites. The "cells" of the table are filled with two items of information:

(1) The number of pupils found in a given category on each of the two variables of interest.

(2) The percent of total pupils in the table.

A cell is the data found at the intersection of a row and a column.

In addition to cell counts and percents, summary statistics are found below the tables. The means and standard deviations of the particular variables in question are given. Inspection of the tables will provide an indication of the relationships which exist between the two variables.

Generally speaking, a relationship may be observed by noting the degree to which pupils are concentrated in a few cells from one corner of a table to the other. If a perfect relationship existed, all pupils might, for example, be concentrated in the cells along the diagonal of the table.

Table 5 consists of four summaries of the relationship between pupil marks in school and responses to certain CardPac Inventory items. Each summary contains the following:

(1) The number of pupils giving a response to a selected item.

(2) Mean Mark-Point Averages of pupils giving a specific response to a question.

(3) Standard deviation of the Mark-Point Averages for pupils giving a specific response to a question.

Use of the results of these tables will be discussed preceding each table.

TABLE I

The Relationship Between Marks and Composite Score Percentiles Obtained on Either the Iowa Tests of Basic Skills or the Iowa Tests of Educational Development.

1. This table graphically illustrates the relationship between the marks given pupils and their Iowa Testing Program scores. Schools have frequently asked how sensitive achievement tests are to the actual achievement of pupils in their schools. The data of Table 1 will reflect the strength of relationship between marks and achievement test scores. Pupils who achieve high Mark-Point Averages will generally be expected to achieve high scores on achievement tests. The degree to which the relationship does not hold might reflect several reasons:

   (a) Marking practices are not sensitive enough to actual pupil achievement.

   (b) The tests are not measuring the achievement in areas taught in the school.

   (c) Pupils perform differently on standardized achievement tests than for given teacher tests although both may sample the same knowledge.

   (d) Marks may be distributed in a highly non-normal fashion whereas standardized scores will be more normally distributed.

In any event, the appearance of rather random scattering of pupils throughout the table would suggest the need for a close scrutiny of curriculum, marking practices, and testing program for the pupils involved.

2. Examination of the mean Mark-Point Average will indicate how close the marking practices of your particular school parallel other schools in the state. In addition, the standard deviation will indicate the "spread" of marks around the mean. About two-thirds of the pupils fall within plus or minus one standard deviation. For example, if a school had a mean Mark-Point Average in grade 7 of 2.26 and a standard deviation of .88, this would mean about two-thirds of the pupils had marks ranging from 1.38 to 3.14 (2.26 ± ·88).

3. Examination of the mean ITBS - ITED Composite will provide a further comparison with other schools. In the case where pupils were given Iowa Tests of Basic Skills, the mean will be a mean grade equivalent. For the Iowa Tests of Educational Development, the mean will be based on standard scores. The standard deviations are likewise expressed in units of the test battery given. Schools having a more homogeneous group of pupils (with respect to achievement) will show a smaller standard deviation than the statewide summary.

It should be emphasized that while the table values for ITBS and ITED are for percentile intervals (using Iowa norms), the mean and standard deviations were computed in terms of standard scores or Grade Equivalents.

The percent value for each cell of the statewide totals has been computed to the 100th place for accuracy. Adding the percents for each cell throughout the table will result in a total very close or equal to 100. Local percents have been truncated to the nearest whole percent. While these are accurate to within one percent for any one cell, they will not add up to 100 percent because of cumulative truncation error.

Results obtained on the ITBS and ITED in this report may differ from those of Iowa Testing Programs. This may be due to the fact that only pupils whose marks were reported through the CardPac data-collection system were included in this report.

STATEWIDE SUMMARY

ANALYSIS FOR GRADE 9

1. THE RELATIONSHIP BETWEEN MARKS AND COMPOSITE SCORE PERCENTILES OBTAINED ON EITHER THE IOWA TESTS OF BASIC SKILLS OR THE IOWA TESTS OF EDUCATIONAL DEVELOPMENT.

MARK POINT AVERAGE CATEGORIES

	0.0- 0.5	0.6- 1.0	1.1- 1.5	1.6- 2.0	2.1- 2.5	2.6- 3.0	3.1- 3.5	3.6- 4.0	
ITBS-ITED COMPOSITE	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	TOTAL
1- 10	88	477	1026	770	299	107	43	25	2835
	0.30	1.61	3.46	2.59	1.01	0.36	0.14	0.08	
11- 20	24	230	697	923	454	101	29	16	2474
	0.08	0.77	2.35	3.11	1.53	0.34	0.10	0.05	
21- 30	18	192	750	1289	888	274	68	28	3507
	0.06	0.65	2.53	4.34	2.99	0.92	0.23	0.09	
31- 40	9	63	342	818	689	263	70	22	2276
	0.03	0.21	1.15	2.75	2.32	0.89	0.24	0.07	
41- 50	2	78	410	1239	1466	745	188	49	4177
	0.01	0.26	1.38	4.17	4.94	2.51	0.63	0.17	
51- 60	2	20	154	510	715	500	172	42	2115
	0.01	0.07	0.52	1.72	2.41	1.68	0.58	0.14	
61- 70	2	19	150	605	1166	1097	434	102	3575
	0.01	0.06	0.51	2.04	3.93	3.69	1.46	0.34	
71- 80	0	9	55	327	778	1049	656	175	3049
	0.00	0.03	0.19	1.10	2.62	3.53	2.21	0.59	
81- 90	1	6	46	170	448	759	632	295	2357
	0.00	0.02	0.15	0.57	1.51	2.56	2.13	0.99	
91-100	0	5	31	82	260	737	1034	1180	3329
	0.00	0.02	0.10	0.28	0.88	2.48	3.48	3.97	
TOTAL	146	1099	3661	6733	7163	5632	3326	1934	29694.

MEAN MARK POINT AVERAGE 2.30 STANDARD DEVIATION 0.76

MEAN ITBS-ITED COMPOSITE 14.722 STANDARD DEVIATION 5.56

· STATEWIDE SUMMARY
ANALYSIS FOR GRADE 10

1. THE RELATIONSHIP BETWEEN MARKS AND COMPOSITE SCORE PERCENTILES OBTAINED ON EITHER THE IOWA TESTS OF BASIC SKILLS OR THE IOWA TESTS OF EDUCATIONAL DEVELOPMENT.

MARK POINT AVERAGE CATEGORIES

	0.0- 0.5	0.6- 1.0	1.1- 1.5	1.6- 2.0	2.1- 2.5	2.6- 3.0	3.1- 3.5	3.6- 4.0	
ITBS-ITED COMPOSITE	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	TOTAL
1- 10	107	654	1108	666	179	42	23	12	2791
	0.39	2.37	4.01	2.41	0.65	0.15	0.08	0.04	
11- 20	35	269	769	810	318	85	24	12	2322
	0.13	0.97	2.78	2.93	1.15	0.31	0.09	0.04	
21- 30	30	189	727	1218	676	194	48	18	3100
	0.11	0.68	2.63	4.41	2.45	0.70	0.17	0.07	
31- 40	4	69	365	688	520	206	36	8	1896
	0.01	0.25	1.32	2.49	1.88	0.75	0.13	0.03	
41- 50	3	76	420	1152	1108	512	140	41	3452
	0.01	0.27	1.52	4.17	4.01	1.85	0.51	0.15	
51- 60	5	25	207	842	1166	796	266	54	3361
	0.02	0.09	0.75	3.05	4.22	2.88	0.96	0.20	
61- 70	1	10	87	341	603	556	232	53	1883
	0.00	0.04	0.31	1.23	2.18	2.01	0.84	0.19	
71- 80	1	6	52	323	832	986	537	155	2892
	0.00	0.02	0.19	1.17	3.01	3.57	1.94	0.56	
81- 90	1	1	28	185	621	1163	968	437	3404
	0.00	0.00	0.10	0.67	2.25	4.21	3.50	1.58	
91-100	0	2	5	44	150	494	829	1023	2547
	0.00	0.01	0.02	0.16	0.54	1.79	3.00	3.70	
TOTAL	187	1301	3768	6269	6173	5034	3103	1813	27648.

MEAN MARK POINT AVERAGE 2.26 STANDARD DEVIATION 0.79
MEAN ITBS-ITED COMPOSITE 16.824 STANDARD DEVIATION 5.85

STATEWIDE SUMMARY
ANALYSIS FOR GRADE 11

1. THE RELATIONSHIP BETWEEN MARKS AND COMPOSITE SCORE PERCENTILES OBTAINED ON EITHER THE IOWA TESTS OF BASIC SKILLS OR THE IOWA TESTS OF EDUCATIONAL DEVELOPMENT.

MARK POINT AVERAGE CATEGORIES

	0.0- 0.5	0.6- 1.0	1.1- 1.5	1.6- 2.0	2.1- 2.5	2.6- 3.0	3.1- 3.5	3.6- 4.0	
ITBS-ITED COMPOSITE	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	TOTAL
1- 10	68 0.26	415 1.56	896 3.37	572 2.15	182 0.68	43 0.16	18 0.07	6 0.02	2200
11- 20	24 0.09	245 0.92	862 3.24	1114 4.18	558 2.10	164 0.62	44 0.17	16 0.06	3027
21- 30	9 0.03	106 0.40	548 2.06	1008 3.79	726 2.73	259 0.97	55 0.21	14 0.05	2725
31- 40	2 0.01	61 0.23	379 1.42	924 3.47	974 3.66	416 1.56	112 0.42	14 0.05	2882
41- 50	1 0.00	18 0.07	112 0.42	454 1.71	521 1.96	323 1.21	85 0.32	22 0.08	1536
51- 60	0 0.00	30 0.11	199 0.75	799 3.00	1123 4.22	859 3.23	319 1.20	75 0.28	3404
61- 70	3 0.01	15 0.06	101 0.38	484 1.82	958 3.60	990 3.72	451 1.69	114 0.43	3116
71- 80	0 0.00	4 0.02	49 0.18	276 1.04	661 2.48	921 3.46	599 2.25	198 0.74	2708
81- 90	0 0.00	1 0.00	19 0.07	124 0.47	433 1.63	716 2.69	719 2.70	342 1.28	2354
91-100	1 0.00	7 0.03	8 0.03	50 0.19	249 0.94	510 1.92	883 3.32	966 3.63	2674
TOTAL	108	902	3173	5805	6385	5201	3285	1767	26626.

MEAN MARK POINT AVERAGE 2.33 STANDARD DEVIATION 0.76
MEAN ITBS-ITED COMPOSITE 19.092 STANDARD DEVIATION 6.29

STATEWIDE SUMMARY
ANALYSIS FOR GRADE 12

1. THE RELATIONSHIP BETWEEN MARKS AND COMPOSITE SCORE PERCENTILES OBTAINED IN EITHER THE IOWA TESTS OF BASIC SKILLS OR THE IOWA TESTS OF EDUCATIONAL DEVELOPMENT.

MARK POINT AVERAGE CATEGORIES

	0.0-0.5	0.6-1.0	1.1-1.5	1.6-2.0	2.1-2.5	2.6-3.0	3.1-3.5	3.6-4.0	
ITBS-ITED COMPOSITE	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	TOTAL
1- 10	26	222	858	954	396	116	43	20	2635
	0.11	0.91	3.53	3.93	1.63	0.48	0.18	0.08	
11- 20	8	80	520	1043	768	325	82	23	2849
	0.03	0.33	2.14	4.30	3.16	1.34	0.34	0.09	
21- 30	4	33	256	672	744	382	107	28	2226
	0.02	0.14	1.05	2.77	3.06	1.57	0.44	0.12	
31- 40	1	20	185	667	871	678	213	54	2689
	0.00	0.08	0.76	2.75	3.59	2.79	0.88	0.22	
41- 50	1	9	74	238	418	391	137	38	1306
	0.00	0.04	0.30	0.98	1.72	1.61	0.56	0.16	
51- 60	0	12	92	413	827	862	448	120	2774
	0.00	0.05	0.38	1.70	3.41	3.55	1.84	0.49	
61- 70	0	4	52	281	743	938	548	225	2791
	0.00	0.02	0.21	1.16	3.06	3.86	2.26	0.93	
71- 80	1	5	28	145	368	659	545	256	2007
	0.00	0.02	0.12	0.60	1.52	2.71	2.24	1.05	
81- 90	0	2	7	118	318	839	880	557	2721
	0.00	0.01	0.03	0.49	1.31	3.46	3.62	2.29	
91-100	0	1	6	26	118	399	687	1048	2285
	0.00	0.00	0.02	0.11	0.49	1.64	2.83	4.32	
TOTAL	41	388	2078	4557	5571	5589	3690	2369	24283.

MEAN MARK POINT AVERAGE	2.50	STANDARD DEVIATION	0.74
MEAN ITBS-ITED COMPOSITE	20.893	STANDARD DEVIATION	6.72

TABLE 2

The Relationship Between Marks and the Level of Education Received by the Mother.

Educational experiences of parents are frequently considered to be important determiners of pupil achievement in school. In particular it is hypothesized that if parents have progressed to a higher level of education, then their children will achieve higher marks in school. This hypothesis is examined for the case of the mother's educational level. Table 2 provides the frequencies of pupils in various mark-point categories whose mother possesses given amounts of educational experience (as measured in years in school or degree held). Generally, most pupils' mothers will have 7-12 years of high school education. A smaller but significant number will have had below 7 years or above 12 years of schooling. If the value 1 is assigned to the 0-6 year category, 2 to the 7-12 category, etc., to the assigning of 6 for the M. A. plus category, an average can be computed for the mother's educational level. This is presented below the table. In addition, the standard deviation is provided. Generally, the distribution of pupils in the education levels will be "skewed" to the right. That is, pupils whose mothers have education at the lower levels will be more frequent than those at the higher levels. This is borne out when examining the column of totals on the statewide summary.

The mean and standard deviations for the Mark-Point Averages will be the same as reported for like grades in Table 1. They are reported here for convenience of reference.

STATEWIDE SUMMARY
ANALYSIS FOR GRADE 9

2. THE RELATIONSHIP BETWEEN MARKS AND THE LEVEL OF EDUCATION RECEIVED BY THE MOTHER.

MARK POINT AVERAGE CATEGORIES

	0.0- 0.5	0.6- 1.0	1.1- 1.5	1.6- 2.0	2.1- 2.5	2.6- 3.0	3.1- 3.5	3.6- 4.0	
HIGHEST EDUCATION	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	TOTAL
0- 6	16	144	464	720	637	453	251	106	2791
	0.05	0.48	1.56	2.42	2.15	1.53	0.85	0.36	
7-12	92	713	2399	4343	4355	3174	1663	846	17585
	0.31	2.40	8.08	14.63	14.67	10.69	5.60	2.85	
12+2	13	101	430	1044	1522	1432	1000	668	6210
	0.04	0.34	1.45	3.52	5.13	4.82	3.37	2.25	
B.A.	2	12	49	177	294	341	317	251	1443
	0.01	0.04	0.17	0.60	0.99	1.15	1.07	0.85	
M.A.	1	2	4	25	31	49	26	32	170
	0.00	0.01	0.01	0.08	0.10	0.17	0.09	0.11	
M.A.+	1	1	2	7	7	5	4	2	29
	0.00	0.00	0.01	0.02	0.02	0.02	0.01	0.01	
CAN'T SAY	21	126	313	417	317	178	65	29	1466
	0.07	0.42	1.05	1.40	1.07	0.60	0.22	0.10	
TOTAL	146	1099	3661	6733	7163	5632	3326	1934	29694

MEAN MARK POINT AVERAGE 2.30 STANDARD DEVIATION 0.76
MEAN EDUCATION SCALE VALUE 2.48 STANDARD DEVIATION 1.25

STATEWIDE SUMMARY

ANALYSIS FOR GRADE 10

2. THE RELATIONSHIP BETWEEN MARKS AND THE LEVEL OF EDUCATION RECEIVED BY THE MOTHER.

MARK POINT AVERAGE CATEGORIES

HIGHEST EDUCATION	0.0-0.5 N PCNT	0.6-1.0 N PCNT	1.1-1.5 N PCNT	1.6-2.0 N PCNT	2.1-2.5 N PCNT	2.6-3.0 N PCNT	3.1-3.5 N PCNT	3.6-4.0 N PCNT	TOTAL
0-6 YEARS	21	164	449	670	601	467	241	120	2733
	0.08	0.59	1.62	2.42	2.17	1.69	0.87	0.43	
7-12	120	851	2500	4019	3717	2800	1599	783	16389
	0.43	3.08	9.04	14.54	13.44	10.13	5.78	2.83	
12+2	16	151	526	1142	1358	1340	896	601	6030
	0.06	0.55	1.90	4.13	4.91	4.85	3.24	2.17	
B.A.	1	12	65	167	302	290	294	255	1386
	0.00	0.04	0.24	0.60	1.09	1.05	1.06	0.92	
M. A.	0	3	14	21	35	34	15	19	141
	0.00	0.01	0.05	0.08	0.13	0.12	0.05	0.07	
M. A.+	1	2	4	6	2	6	4	7	32
	0.00	0.01	0.01	0.02	0.01	0.02	0.01	0.03	
CAN'T SAY	28	118	210	244	158	97	54	28	937
	0.10	0.43	0.76	0.88	0.57	0.35	0.20	0.10	
TOTAL	187	1301	3768	6269	6173	5034	3103	1813	27648

MEAN MARK POINT AVERAGE 2.26 STANDARD DEVIATION 0.79
MEAN EDUCATION SCALE VALUE 2.41 STANDARD DEVIATION 1.12

STATEWIDE SUMMARY
ANALYSIS FOR GRADE 11

2. THE RELATIONSHIP BETWEEN MARKS AND THE LEVEL OF EDUCATION RECEIVED BY THE MOTHER.

MARK POINT AVERAGE CATEGORIES

	0.0- 0.5	0.6- 1.0	1.1- 1.5	1.6- 2.0	2.1- 2.5	2.6- 3.0	3.1- 3.5	3.6- 4.0	
HIGHEST EDUCATION	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	TOTAL
0- 6 YEARS	25 0.09	129 0.48	456 1.71	668 2.51	654 2.46	480 1.80	263 0.99	121 0.45	2796
7-12	66 0.25	574 2.16	2054 7.71	3641 13.67	3854 14.47	2859 10.74	1682 6.32	836 3.14	15566
12+2	8 0.03	107 0.40	439 1.65	1099 4.13	1398 5.25	1415 5.31	984 3.70	540 2.03	5990
B.A.	1 0.00	11 0.04	47 0.18	159 0.60	275 1.03	326 1.22	279 1.05	219 0.82	1317
M.A.	0 0.00	5 0.02	11 0.04	23 0.09	40 0.15	27 0.10	37 0.14	24 0.09	167
M.A.+	0 0.00	2 0.01	2 0.01	7 0.03	5 0.02	5 0.02	0 0.00	4 0.02	25
CAN'T SAY	8 0.03	74 0.28	164 0.62	208 0.78	159 0.60	89 0.33	40 0.15	23 0.09	765
TOTAL	108	902	3173	5805	6385	5201	3285	1767	26626

MEAN MARK POINT AVERAGE 2.33 STANDARD DEVIATION 0.76
MEAN EDUCATION SCALE VALUE 2.39 STANDARD DEVIATION 1.08

STATEWIDE SUMMARY
ANALYSIS FOR GRADE 12

2. THE RELATIONSHIP BETWEEN MARKS AND THE LEVEL OF EDUCATION RECEIVED BY THE MOTHER.

MARK POINT AVERAGE CATEGORIES

	0.0- 0.5	0.6- 1.0	1.1- 1.5	1.6- 2.0	2.1- 2.5	2.6- 3.0	3.1- 3.5	3.6- 4.0	TOTAL
HIGHEST EDUCATION	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	
0-6	5	59	318	585	653	660	319	208	2807
	0.02	0.24	1.31	2.41	2.69	2.72	1.31	0.86	
7-12	31	251	1352	2878	3337	3081	1962	1063	13955
	0.13	1.03	5.57	11.85	13.74	12.69	8.08	4.38	
12+2	3	45	264	815	1194	1397	1037	777	5532
	0.01	0.19	1.09	3.36	4.92	5.75	4.27	3.20	
B.A.	0	3	26	110	206	318	298	267	1228
	0.00	0.01	0.11	0.45	0.85	1.31	1.23	1.10	
M.A.	0	3	5	15	28	31	20	21	123
	0.00	0.01	0.02	0.06	0.12	0.13	0.08	0.09	
M.A.+	0	0	3	4	7	0	2	6	22
	0.00	0.00	0.01	0.02	0.03	0.00	0.01	0.02	
CAN'T SAY	2	27	110	150	146	102	52	27	616
	0.01	0.11	0.45	0.62	0.60	0.42	0.21	0.11	
TOTAL	41	388	2078	4557	5571	5589	3690	2369	24283

MEAN MARK POINT AVERAGE	2.50	STANDARD DEVIATION	0.74
MEAN EDUCATION SCALE VALUE	2.36	STANDARD DEVIATION	1.05

TABLE 3

The Relationship Between Marks and the Occupational Level of the Father.

Just as the education of parents is felt to bear a relationship upon pupil achievement, so is the occupational level of parents thought to relate to achievement. Table 3 explores the relationship between the father's occupation and the pupil's marks. The levels of the occupation are self explanatory.

In the interpretation of this table it should be remembered that pupils frequently do not have a clear idea of their father's occupation. This will be more true at the lower grade levels. Choice of "foils" for a question concerning occupations is, indeed, a difficult problem. There are thousands of job descriptions which are difficult to categorize in the levels chosen for this item. For example, children whose parents are serving in the armed forces frequently have difficulty classifying the occupational level of their parents. In spite of these shortcomings, a weak trend may still be evident from this table. In addition, it is interesting to observe the relative frequency of occupational levels as reported by pupils. Pupils from rural communities will generally have a greater proportion of parents in farm-related occupations. Comparisons of this type will indicate the general nature of your school population and perhaps suggest differential curriculum needs such as vocational agriculture and commercial education.

Interpretation of means and standard deviations is similar to Tables 1 and 2.

STATEWIDE SUMMARY
ANALYSIS FOR GRADE 9

3. THE RELATIONSHIP BETWEEN MARKS AND THE OCCUPATIONAL LEVEL OF THE FATHER.

MARK POINT AVERAGE CATEGORIES.

	0.0- 0.5	0.6- 1.0	1.1- 1.5	1.6- 2.0	2.1- 2.5	2.6- 3.0	3.1- 3.5	3.6- 4.0	
LEVEL*	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	TOTAL
1	76	592	1850	3111	2929	2057	1065	527	12207
	0.26	1.99	6.23	10.48	9.86	6.93	3.59	1.77	
2	24	187	569	1043	1025	786	439	198	4271
	0.08	0.63	1.92	3.51	3.45	2.65	1.48	0.67	
3	29	170	608	1061	1175	789	422	222	4476
	0.10	0.57	2.05	3.57	3.96	2.66	1.42	0.75	
4	13	133	564	1268	1714	1603	1075	711	7081
	0.04	0.45	1.90	4.27	5.77	5.40	3.62	2.39	
5	4	17	70	250	320	397	325	276	1659
	0.01	0.06	0.24	0.84	1.08	1.34	1.09	0.93	
TOTAL	146	1099	3661	6733	7163	5632	3326	1934	29694

MEAN MARK POINT AVERAGE 2.30 STANDARD DEVIATION 0.76
MEAN OCCUPATIONAL LEVEL 2.38 STANDARD DEVIATION 1.37

* LEVEL 1 = UNKNOWN, FARM WORKERS, HOUSEHOLD WORKERS. LEVEL 2 = SEMI-SKILLED AND SERVICE WORKERS. LEVEL 3 = SKILLED WORKERS AND TECHNICIANS. LEVEL 4 = MANAGERS AND OFFICIALS. LEVEL 5 = PROFESSIONAL.

STATEWIDE SUMMARY
ANALYSIS FOR GRADE 10

3. THE RELATIONSHIP BETWEEN MARKS AND THE OCCUPATIONAL LEVEL OF THE FATHER.

MARK POINT AVERAGE CATEGORIES

	0.0- 0.5	0.6- 1.0	1.1- 1.5	1.6- 2.0	2.1- 2.5	2.6- 3.0	3.1- 3.5	3.6- 4.0	
LEVEL *	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	TOTAL
1	118	723	1843	2714	2396	1795	921	517	11027
	0.43	2.62	6.67	9.82	8.67	6.49	3.33	1.87	
2	22	165	584	995	870	692	359	189	3876
	0.08	0.60	2.11	3.60	3.15	2.50	1.30	0.68	
3	23	228	637	1073	966	710	427	192	4256
	0.08	0.82	2.30	3.88	3.49	2.57	1.54	0.69	
4	24	166	636	1286	1630	1510	1095	688	7035
	0.09	0.60	2.30	4.65	5.90	5.46	3.96	2.49	
5	0	19	68	201	311	327	301	227	1454
	0.00	0.07	0.25	0.73	1.12	1.18	1.09	0.82	
TOTAL	187	1301	3768	6269	6173	5034	3103	1813	27648

MEAN MARK POINT AVERAGE 2.26 STANDARD DEVIATION 0.79
MEAN OCCUPATIONAL LEVEL 2.42 STANDARD DEVIATION 1.37

* LEVEL 1 = UNKNOWN, FARM WORKERS, HOUSEHOLD WORKERS. LEVEL 2 = SEMI-SKILLED AND SERVICE WORKERS. LEVEL 3 = SKILLED WORKERS AND TECHNICIANS. LEVEL 4 = MANAGERS AND OFFICIALS. LEVEL 5 = PROFESSIONAL.

STATEWIDE SUMMARY
ANALYSIS FOR GRADE 11

3. THE RELATIONSHIP BETWEEN MARKS AND THE OCCUPATIONAL LEVEL OF THE FATHER.

MARK POINT AVERAGE CATEGORIES

	0.0- 0.5	0.6- 1.0	1.1- 1.5	1.6- 2.0	2.1- 2.5	2.6- 3.0	3.1- 3.5	3.6- 4.0	
LEVEL *	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	TOTAL
1	74	466	1551	2435	2410	1783	1001	479	10199
	0.28	1.75	5.83	9.15	9.05	6.70	3.76	1.80	
2	9	147	460	858	881	716	390	187	3648
	0.03	0.55	1.73	3.22	3.31	2.69	1.46	0.70	
3	7	144	543	945	978	696	412	186	3911
	0.03	0.54	2.04	3.55	3.67	2.61	1.55	0.70	
4	17	132	555	1393	1784	1656	1181	674	7392
	0.06	0.50	2.08	5.23	6.70	6.22	4.44	2.53	
5	1	13	64	174	332	350	301	241	1476
	0.00	0.05	0.24	0.65	1.25	1.31	1.13	0.91	
TOTAL	108	902	3173	5805	6385	5201	3285	1767	26626

MEAN MARK POINT AVERAGE	2.33	STANDARD DEVIATION	0.76
MEAN OCCUPATIONAL LEVEL	2.49	STANDARD DEVIATION	1.38

* LEVEL 1 = UNKNOWN, FARM WORKERS, HOUSEHOLD WORKERS. LEVEL 2 = SEMI-SKILLED AND SERVICE WORKERS. LEVEL 3 = SKILLED WORKERS AND TECHNICIANS. LEVEL 4 = MANAGERS AND OFFICIALS. LEVEL 5 = PROFESSIONAL.

STATEWIDE SUMMARY
ANALYSIS FOR GRADE 12

3. THE RELATIONSHIP BETWEEN MARKS AND THE OCCUPATIONAL LEVEL OF THE FATHER.

MARK POINT AVERAGE CATEGORIES

	0.0- 0.5	0.6- 1.0	1.1- 1.5	1.6- 2.0	2.1- 2.5	2.6- 3.0	3.1- 3.5	3.6- 4.0	
LEVEL *	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	TOTAL
1	25 0.10	206 0.85	1031 4.25	2028 8.35	2094 8.62	1938 7.98	1116 4.60	632 2.60	9070
2	5 0.02	50 0.21	331 1.36	712 2.93	842 3.47	748 3.08	458 1.89	257 1.06	3403
3	5 0.02	64 0.26	340 1.40	710 2.92	860 3.54	748 3.08	470 1.94	256 1.05	3453
4	6 0.02	64 0.26	331 1.36	973 4.01	1532 6.31	1818 7.49	1346 5.54	933 3.84	7003
5	0 0.00	4 0.02	45 0.19	134 0.55	243 1.00	337 1.39	300 1.24	291 1.20	1354
TOTAL	41	388	2078	4557	5571	5589	3690	2369	24283

MEAN MARK POINT AVERAGE ·	2.50	STANDARD DEVIATION	0.74
MEAN OCCUPATIONAL LEVEL	2.51	STANDARD DEVIATION	1.38

* LEVEL 1 = UNKNOWN, FARM WORKERS, HOUSEHOLD WORKERS. LEVEL 2 = SEMI-SKILLED AND SERVICE WORKERS. LEVEL 3 = SKILLED WORKERS AND TECHNICIANS. LEVEL 4 = MANAGERS AND OFFICIALS. LEVEL 5 = PROFESSIONAL.

TABLE 4

The Relationship Between Father's Occupational Level and the Expectation Level for Post-High School Education.

The possibility that post-high school education aspirations are governed by parent occupation is a question worthy of exploration. If there is no relation, one could perhaps expect similar representation from various occupational groupings in our colleges, vocational schools, etc. Previous research, however, suggests that such is not the case. Should a significant relationship be observed in Table 4, it would contribute to our understanding of differences which do exist in post-high school education plans. In addition, Table 4 will provide a rapid summary of the educational plans of your pupils. It will be interesting to note differences which exist in educational plans from grade level to grade level.

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STATEWIDE SUMMARY
ANALYSIS FOR GRADE 9

4. THE RELATIONSHIP BETWEEN FATHERS OCCUPATIONAL LEVEL AND THE EXPECTATION LEVEL FOR POST HIGH SCHOOL EDUCATION.

	FATHER OCCUPATIONAL LEVEL *					
	1	2	3	4	5	
EDUCATIONAL EXPECTATION	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	TOTAL
LESS THAN HS	283	61	74	91	15	524
	0.95	0.21	0.25	0.31	0.05	
HIGH SCHOOL,	2482	675	630	621	26	4434
	8.36	2.27	2.12	2.09	0.09	
JOB OR MILITARY	1915	589	607	565	55	3731
	6.45	1.98	2.04	1.90	0.19	
TECH., TRADE, OR	3233	1081	1174	1531	161	7180
BUSINESS	10.89	3.64	3.95	5.16	0.54	
JR. COLLEGE	1231	472	489	725	72	2989
	4.15	1.59	1.65	2.44	0.24	
B.A. DEGREE	2518	1050	1189	2763	785	8305
	8.48	3.54	4.00	9.30	2.64	
BEYOND B. A.	545	343	313	785	545	2531
	1.84	1.16	1.05	2.64	1.84	
TOTAL	12207	4271	4476	7081	1659	29694

MEAN OCCUPATIONAL LEVEL	2.38	STANDARD DEVIATION	1.37
MEAN EDUCATIONAL SCALE VALUE	4.44	STANDARD DEVIATION	1.64

* SEE BOTTOM OF TABLE 3

STATEWIDE SUMMARY
ANALYSIS FOR GRADE 10

4. THE RELATIONSHIP BETWEEN FATHERS OCCUPATIONAL LEVEL AND THE EXPECTATION LEVEL FOR POST HIGH SCHOOL EDUCATION.

FATHER OCCUPATIONAL LEVEL*

EDUCATIONAL EXPECTATION	1 N PCNT	2 N PCNT	3 N PCNT	4 N PCNT	5 N PCNT	TOTAL
LESS THAN HS	201	45	53	56	24	379
	0.73	0.16	0.19	0.20	0.09	
HIGH SCHOOL	2168	608	584	544	19	3923
	7.84	2.20	2.11	1.97	0.07	
JOB OR MILITARY	1682	530	572	602	45	3431
	6.08	1.92	2.07	2.18	0.16	
TECHNICAL, TRADE OR BUSINESS	3196	1044	1211	1697	146	7294
	11.56	3.78	4.38	6.14	0.53	
JR COLLEGE	1054	409	449	657	101	2670
	3.81	1.48	1.62	2.38	0.37	
B.A. DEGREE	2296	994	1112	2727	684	7813
	8.30	3.60	4.02	9.86	2.47	
BEYOND B.A.	430	246	275	752	435	2138
	1.56	0.89	0.99	2.72	1.57	
TOTAL	11027	3876	4256	7035	1454	27648

MEAN OCCUPATIONAL LEVEL 2.42 STANDARD DEVIATION 1.37
MEAN EDUCATIONAL SCALE VALUE 4.44 STANDARD DEVIATION 1.59

* SEE BOTTOM OF TABLE 3

STATEWIDESUMMARY
ANALYSIS FOR GRADE 11

4. THE RELATIONSHIP BETWEEN FATHERS OCCUPATIONAL LEVEL AND THE EXPECTATION LEVEL FOR POST HIGH SCHOOL EDUCATION.

FATHER OCCUPATIONAL LEVEL *

	1	2	3	4	5	
EDUCATIONAL EXPECTATION	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	TOTAL
LESS THAN HS	168	45	59	62	21	355
	0.63	0.17	0.22	0.23	0.08	
HIGH SCHOOL	1857	460	481	551	16	3365
	6.97	1.73	1.81	2.07	0.06	
JOB OR MILITARY	1650	553	551	611	41	3406
	6.20	2.08	2.07	2.29	0.15	
TECHNICAL, TRADE, OR BUSINESS	3075	1048	1142	1748	138	7151
	11.55	3.94	4.29	6.57	0.52	
JR. COLLEGE	913	371	432	691	70	2477
	3.43	1.39	1.62	2.60	0.26	
B.A. DEGREE	2162	958	1013	2914	724	7771
	8.12	3.60	3.80	10.94	2.72	
BEYOND B. A.	374	213	233	815	466	2101
	1.40	0.80	0.88	3.06	1.75	
TOTAL	10199	3648	3911	7392	1476	26626

MEAN OCCUPATIONAL LEVEL 2.49 STANDARD DEVIATION 1.38
MEAN EDUCATIONAL SCALE VALUE 4.49 STANDARD DEVIATION 1.58

* SEE BOTTOM OF TABLE 3

STATEWIDE SUMMARY
ANALYSIS FOR GRADE 12

4. THE RELATIONSHIP BETWEEN FATHERS OCCUPATIONAL LEVEL AND THE EXPECTATION LEVEL FOR POST HIGH SCHOOL EDUCATION.

	FATHER OCCUPATIONAL LEVEL *					
	1	2	3	4	5	
EDUCATIONAL EXPECTATION	N PCNT	N PCNT	N PCNT	N PCNT	N PCNT	TOTAL
LESS THAN HS	206	44	53	73	31	407
	0.85	0.18	0.22	0.30	0.13	
HIGH SCHOOL	1369	387	392	485	22	2655
	5.64	1.59	1.61	2.00	0.09	
JOB OR MILITARY	1686	574	562	639	58	3519
	6.94	2.36	2.31	2.63	0.24	
TECHNICAL, TRADE OR BUSINESS	2553	816	883	1444	126	5822
	10.51	3.36	3.64	5.95	0.52	
JR COLLEGE	728	311	312	499	39	1889
	3.00	1.28	1.28	2.05	0.16	
B.A. DEGREE	2078	972	952	2926	619	7547
	8.56	4.00	3.92	12.05	2.55	
BEYOND B.A.	450	299	299	937	459	2444
	1.85	1.23	1.23	3.86	1.89	
TOTAL	9070	3403	3453	7003	1354	24283

MEAN OCCUPATIONAL LEVEL 2.51 STANDARD DEVIATION 1.38
MEAN EDUCATIONAL SCALE VALUE 4.59 STANDARD DEVIATION 1.62

* SEE BOTTOM OF TABLE 3

TABLE 5

Mean Mark-Point Averages and Standard Deviations of Mark-Point Averages for Pupils Classified by Their Responses to Selected Items of the CardPac Inventory.

Five items from the CardPac Inventory are analyzed in this table. It was suspected that pupil achievement might be measured indirectly through the responses of pupils to various questions. Item D, for example, provides evidence that pupils by-and-large have a good idea of their school achievement. Another item showing slight relationship to achievement is item A--the number of hours a week a pupil works for pay. While there is substantial variability, it nevertheless appears that pupils working more than 15 hours a week make poorer achievement in school. This is not to say that the work is responsible for lower achievement but does suggest that pupils working long hours may be in academic difficulty.

It has been suggested that better students need spend fewer hours in homework preparation. Item B would tend to refute this as the pupils spending more time in homework preparation appear to achieve better marks.

The degree to which interpersonal problems in the school environment affect school achievement is explored in item C. That such a supposition appears justifiable is supported to a degree by the data of item C. Pupils responding so as to indicate a great many unpleasant experiences achieve poorer than those indicating fewer problems. Again, it is not clear whether or not there is a causative relationship here. Both achievement and interpersonal problems may be indicative of other difficulties a pupil is experiencing. Nevertheless, a pupil responding in such a way as to indicate a number of interpersonal problems does indicate a poorer achiever. The question raised then is "can the level of achievement be raised for pupils experiencing an improvement in interpersonal relations?" Schools with adequate guidance counseling facilities might well explore this possibility in a controlled experiment with children poor in social adjustment.

STATEWIDE SUMMARY
ANALYSIS FOR GRADE 9

5. MEAN MARK POINT AVERAGES AND STANDARD DEVIATIONS OF MARK POINT AVERAGES FOR PUPILS CLASSIFIED BY THEIR RESPONSES TO SELECTED ITEMS OF THE CARDPAC INVENTORY.

ITEM A. ON THE AVERAGE, DURING THE SCHOOL YEAR, HOW MANY HOURS A WEEK DO YOU WORK FOR WHICH YOU ARE PAID.

RESPONSE	NO. OF PUPILS	MEAN MPA	STD. DEV. MPA
NONE	10988.	2.369	0.766
1-5	9330.	2.401	0.748
6-10	4613.	2.220	0.734
11-15	1897.	2.150	0.714
16-20	1098.	2.031	0.703
21 OR MORE	0.	0.000	0.000

ITEM B. ON THE AVERAGE HOW MANY HOURS EACH WEEK DO YOU SPEND DOING HOMEWORK OUTSIDE OF SCHOOL.

NONE	2731.	2.016	0.725
1-4	14119.	2.196	0.727
5-9	9096.	2.425	0.734
10-14	2773.	2.661	0.762
15 OR MORE	699.	2.760	0.829

ITEM C. HOW MANY UNPLEASANT EXPERIENCES HAVE YOU HAD WITH OTHER STUDENTS IN THE SCHOOL.

A GREAT MANY	599.	1.722	0.705
QUITE A FEW	1755.	1.984	0.718
NOT VERY MANY	7649.	2.168	0.731
VERY FEW	14232.	2.388	0.744
NONE	5129.	2.468	0.755

ITEM D. HOW DO YOUR TEACHERS VIEW YOU.

RESPONSE	NO. OF PUPILS	MEAN MPA	STD. DEV. MPA
AS A TOP PUPIL	1495.	3.371	0.704
A GOOD PUPIL	8531.	2.879	0.557
AN AVERAGE PUPIL	16700.	2.059	0.548
BELOW AVERAGE	2134.	1.377	0.511
A VERY POOR PUPIL	347.	1.363	0.635

STATEWIDE SUMMARY
ANALYSIS FOR GRADE 10

5. MEAN MARK POINT AVERAGES AND STANDARD DEVIATIONS OF MARK POINT AVERAGES FOR PUPILS CLASSIFIED BY THEIR RESPONSES TO SELECTED ITEMS OF THE CARDPAC INVENTORY.

ITEM A. ON THE AVERAGE, DURING THE SCHOOL YEAR, HOW MANY HOURS A WEEK DO YOU WORK FOR WHICH YOU ARE PAID.

RESPONSE	NO. OF PUPILS	MEAN MPA	STD. DEV. MPA
NONE	9842.	2.346	0.794
1-5	7473.	2.400	0.773
6-10	4064.	2.199	0.755
11-15	2166.	2.141	0.740
16-20	1759.	2.043	0.751
21 OR MORE	0.	0.000	0.000

ITEM B. ON THE AVERAGE HOW MANY HOURS EACH WEEK DO YOU SPEND DOING HOMEWORK OUTSIDE OF SCHOOL.

NONE	2456.	1.934	0.724
1-4	12106.	2.111	0.741
5-9	8942.	2.371	0.754
10-14	3061.	2.667	0.759
15 OR MORE	937.	2.867	0.808

ITEM C. HOW MANY UNPLEASANT EXPERIENCES HAVE YOU HAD WITH OTHER STUDENTS IN THE SCHOOL.

A GREAT MANY	476.	1.760	0.747
QUITE A FEW	1290.	1.896	0.746
NOT VERY MANY	6242.	2.088	0.748
VERY FEW	13826.	2.337	0.778
NONE	5602.	2.421	0.767

ITEM D. HOW DO YOUR TEACHERS VIEW YOU.

AS A TOP PUPIL	1351.	3.416	0.696
A GOOD PUPIL	7831.	2.879	0.553
AN AVERAGE PUPIL	15239.	2.025	0.561
BELOW AVERAGE	2487.	1.354	0.516
A VERY POOR PUPIL	383.	1.324	0.780

STATEWIDE SUMMARY
ANALYSIS FOR GRADE 11

5. MEAN MARK POINT AVERAGES AND STANDARD DEVIATIONS OF MARK POINT AVERAGES FOR PUPILS CLASSIFIED BY THEIR RESPONSES TO SELECTED ITEMS OF THE CARDPAC INVENTORY.

ITEM A. ON THE AVERAGE, DURING THE SCHOOL YEAR, HOW MANY HOURS A WEEK DO YOU WORK FOR WHICH YOU ARE PAID.

RESPONSE	NO. OF PUPILS	MEAN MPA	STD. DEV. MPA
NONE	8948.	2.453	0.758
1-5	5687.	2.480	0.754
6-10	3613.	2.299	0.731
11-15	2613.	2.251	0.720
16-20	2375.	2.146	0.699
21 OR MORE	0.	0.000	0.000

ITEM B. ON THE AVERAGE HOW MANY HOURS EACH WEEK DO YOU SPEND DOING HOMEWORK OUTSIDE OF SCHOOL.

NONE	2503.	1.981	0.686
1-4	10895.	2.164	0.709
5-9	8803.	2.432	0.725
10-14	3281.	2.726	0.726
15 OR MORE	996.	2.890	0.753

ITEM C. HOW MANY UNPLEASANT EXPERIENCES HAVE YOU HAD WITH OTHER STUDENTS IN THE SCHOOL.

A GREAT MANY	380.	1.830	0.763
QUITE A FEW	1047.	2.012	0.754
NOT VERY MANY	5717.	2.174	0.738
VERY FEW	13760.	2.390	0.748
NONE	5538.	2.443	0.734

ITEM D. HOW DO YOUR TEACHERS VIEW YOU.

RESPONSE	NO. OF PUPILS	MEAN MPA	STD. DEV. MPA
AS A TOP PUPIL	1476.	3.394	0.658
A GOOD PUPIL	8269.	2.869	0.542
AN AVERAGE PUPIL	14045.	2.067	0.540
BELOW AVERAGE	2102.	1.428	0.521
A VERY POOR PUPIL	351.	1.379	0.663

STATEWIDE SUMMARY
ANALYSIS FOR GRADE 12

5. MEAN MARK POINT AVERAGES AND STANDARD DEVIATIONS OF MARK POINT AVERAGES FOR PUPILS CLASSIFIED BY THEIR RESPONSES TO SELECTED ITEMS OF THE CARDPAC INVENTORY.

ITEM A. ON THE AVERAGE, DURING THE SCHOOL YEAR, HOW MANY HOURS A WEEK DO YOU WORK FOR WHICH YOU ARE PAID.

RESPONSE	NO. OF PUPILS	MEAN MPA	STD. DEV. MPA
NONE	8206.	2.650	0.739
1-5	4213.	2.656	0.733
6-10	2959.	2.480	0.739
11-15	2386.	2.432	0.714
16-20	2555.	2.383	0.692
21 OR MORE	0.	0.000	0.000

ITEM B. ON THE AVERAGE HOW MANY HOURS EACH WEEK DO YOU SPEND DOING HOMEWORK OUTSIDE OF SCHOOL.

NONE	2574.	2.194	0.691
1-4	10079.	2.371	0.702
5-9	7540.	2.593	0.723
10-14	2932.	2.836	0.722
15 OR MORE	990.	3.042	0.710

ITEM C. HOW MANY UNPLEASANT EXPERIENCES HAVE YOU HAD WITH OTHER STUDENTS IN THE SCHOOL.

A GREAT MANY	339.	2.104	0.753
QUITE A FEW	782.	2.193	0.755
NOT VERY MANY	5052.	2.366	0.728
VERY FEW	13099.	2.560	0.739
NONE	4772.	2.582	0.717

ITEM D. HOW DO YOUR TEACHERS VIEW YOU.

RESPONSE	NO. OF PUPILS	MEAN MPA	STD. DEV. MPA
AS A TOP PUPIL	1649.	3.482	0.589
A GOOD PUPIL	8074.	2.982	0.519
AN AVERAGE PUPIL	12432.	2.199	0.550
BELOW AVERAGE	1495.	1.542	0.531
A VERY POOR PUPIL	230.	1.709	0.695

VI

EVALUATION OF SYSTEM

Late in 1966 and early in 1967, several staff meetings were held to review the 1966-67 Secondary CardPac System and to plan the 1967-68 Secondary CardPac System. It was agreed to retain the 1966-67 system without initiating any basic changes. The 1967-68 system would differ from the previous year only in those areas where modifications would improve accuracy and/or effectiveness of the system.

The staff was cognizant of the modifications which should be made in the editing and processing procedures over which MRC had direct control. However, the staff did not feel it would be well advised to make modifications which would affect the local school handling of the system without consulting with the principals themselves. Consequently, it was decided to interview approximately 20 secondary principals asking their suggestions for improvement and opinions about alternate modifications.

Methodology

A questionnaire was devised which, it was hoped, would cover all aspects of CardPac and would open up the interview so that free responses and comments might be had. The CardPac consultant who visited the schools also had with him a copy of the Master Section List and a print-out of the teacher file so that their accuracy might be checked.

The schools visited were selected primarily from those in the western and northern parts of the state. All were contacted in advance and the principals were expecting the visit.

The interview usually lasted two hours. The consultant concentrated upon establishing a good rapport with the principal rather than on a formal question-and-answer session. In almost every instance, the consultant felt that the good will which was gained from this approach was alone worth the time spent in making the visit. Every principal expressed an appreciation of the fact that IEIC personnel took the time to visit with him and help him in understanding the purpose of the CardPac System. The majority were quite flattered by the fact that IEIC personnel visited them individually and asked their personal opinions.

Findings

There were twenty schools involved in this evaluation. In reporting the findings, they were stratified according to 9 through 12 grade enrollment when differences along this dimension existed. While the schools were chosen primarily on the basis of geographic location, they were found to be almost equally divided among the enrollment size categories as seen in the following table:

TABLE 1. NUMBER OF SCHOOLS IN EACH SIZE CATEGORY

	Total Enrollment of Grades 9 through 12			
	0 - 149	150 - 249	250 - 499	500 and above
Number of Schools	4	6	6	4

Each question contained in the evaluation instrument will be presented individually and followed by a tabulation of the responses it elicited.

1. The CardPac materials are sent in alphabetical order by grade. In what order would you like to receive this material? Alpha by grade or . . .

All 20 schools indicated that the present alphabetical order by grade was quite satisfactory. None offered additional comment.

2. By what date do you feel your program is set for the coming year?

3. By what date do you feel your staff is set for the coming year?

	Total Enrollment	0-149	150-249	250-499	500 and above
Program	By August 1	1	4	4	4
	By mid August				
	By end August				
	Later				
Staff	By August 1		2	2	1
	By mid August		1		
	By end August		1	1	
	Later				

The program is fixed in all of the schools visited before August 1. All indicated that it was fixed as early as July 1. Staffing was another matter. The majority of the schools could not give any specific date at which time the individual staff members would be known. The teacher shortage and large teacher turnover were cited as causes for this uncertainty. A few schools stated that their staff was not identified until after school started in September.

4. We now send the Curriculum and Staff List and cards all based upon the previous year. We could send Curriculum and Staff lists early--you would correct and return them (by Sept. 1) and the cards we send would be correct for that current school year. Would you commit yourself to correct and return these lists by Sept. 1?

One large school (H.S. enrollment 1,027 pupils) responded that it could not correct the lists that early. All other schools reacted favorably to the idea and said they would commit themselves to the early deadline.

5. Curriculum List: What additions to the course title list (in back of manual) does your school need? (i.e., What new titles should we add to the list?)

It was pointed out that the IEIC title "General Shop" was not appropriate in this day and age. The title "Industrial Arts" should be returned to the IEIC listing. Many schools further pointed out that the IEIC list was satisfactory and usable as long as the option of using local titles remained.

6. How accurate is the second Curriculum List? Are there any areas on it which could be made more readable? Additional comments:

It was not clear why all course information was not printed for every section of a course but only for the first section. However, this comment did not detract from the overall readability of the List. All principals thought the List accurate. In sampling the science courses for accuracy of reporting titles, the consultant found on the average one wrong title out of six. In a few schools, all junior high science titles did not fit the courses offered.

7. Fall CardPac: What is the most difficult step performed by the school? Difficulty due to manual? to cards? to methodology?

All schools reported a great deal of difficulty in understanding the #12 card--its purpose and procedure. The majority of the principals thought this year's manual better than last year's. The inclusion of pictures was cited as the outstanding improvement.

The principal in the smaller schools usually does all of the card gridding and list correcting. The system is burdensome to them.

The medium-size schools, 250-500, employ capable secretaries who handle most, if not all, of the CardPac routine.

Large schools have many problems unique to their size and which are not covered in the manual. For instance, large numbers of pupils who drop out and return frequently during the year greatly increase the time involved in maintaining CardPac files. The principal of the largest school visited indicated that it was as impossible to account for the pupils who go to other schools in the district for classes as it was to account for those who come to his school.

Many schools pointed out that controlling the quality of teacher participation was a major problem. Several principals confessed they could not properly motivate and instruct their teachers in the CardPac procedures when they themselves were not wholly in sympathy with the system or did not fully understand why they were doing a specific procedure.

8. What areas present the most questions from your staff?

Generally, the staff questioned the necessity of CardPac itself. The principals recognized that for the first time teachers themselves are involved in reporting educational data to the State Department and would therefore question the system. While this questioning the purpose of the system was quite common, it did not represent a major problem from the principal's point of view. Specific cards and particular fields on specific cards presented problems and these will be cited in the findings of question 15.

9. What areas appear to be the easiest? Additional Comments:

In actuality, problems and trouble areas were discussed during the interviews rather than areas of ease or success. No specific responses to this question were recorded.

10. December Feedback: What part of the feedback is most valuable to you?

11. Had you received the feedback earlier (Oct. 15), what part would have been of the most value?

12. What feedback did you find of least value?

13. Had you received the feedback in October, what other printouts would have been of more value?

14. Could the same feedback printed in a different format be of more use?

Additional Comments:

These questions were misunderstood by all principals when they were initially asked. They refer to the December feedback which consisted of a Master Section List, a Professional Staff List, and a Pupil Information List. However, the word "feedback" brought responses dealing with all CardPac feedback--particularly the results of the Pupil Inventory. The immediate and rather strong initial reactions to this question demonstrated the high interest in the general feedback.

All responses referred to the Inventory results. Almost without exception, the principals reported that the feedback was of no value to them. However, they qualified their responses by admitting that maybe they did not understand what it could be used for in their schools. Further, the principals said that the Inventory feedback was returned to them too late for any use. Two principals stated that it would be of great value in recruiting teachers and familiarizing new teachers with the student body characteristics if it were available early enough. Other principals reported that the Inventory results were checked against their local records and found to be greatly in error.

When attention was directed to the December feedback in particular, little or no comment was forthcoming. It was suggested that some type of teacher load analysis, returned to the school by October 15 or earlier, would be of value. The CardPac consultants gained the clear impression that the December feedback was of little practical value to the principal and probably not examined by them at all.

15. Specific Cards: What problems were presented by the individual cards and what suggestions would you make to improve them?

Card #1 Stencil: No Comment

Card #2 Pupil Information: No Comment

Card #7 Staff Card: Several principals were confused about assigning staff codes. Too often one teacher would be assigned two code numbers. Since this is a problem area, it must be assumed that the portion of the manual dealing with staff code numbers is not clear. [This code confusion was reflected on the #7 card--it was not due to the card.]

Card #6 Section Card: Principals questioned the use of the untitled grid field on the lower right hand portion of the card. The same field is also found on the #7 card. Being untitled, there was question about what to do with it.

The Period and Day Met Pattern fields on the front and back of this card were considered difficult to understand by both principals and teachers. Consequently, accuracy in these fields was low.

Card #15 Activity-Supervision (interpretation): See Card #12.

Card #12 Non-teaching (interpretation): Both cards were cited as difficult if not impossible to understand and to grid. The directions were far from satisfactory thus making it very hard to administer and supervise their completion.

Card #5 Pupil Course: No comment

Card #9 Course-Section: No comment

Card #8 Enrollment: Many principals raised the question of what to do with the transfer student. Specifically, when one of their pupils transfers to another district in Iowa, should the principal send his stencil card and/or ID number with him? Also, should the principal make an effort to obtain the pupil's old ID number when he transfers into the district? All implied a desire for transferable CardPac records.

16. Specific Printouts: What problems were presented in reading the specific printouts; how accurately do they reflect what is actually true in your school?

Packing slip:
#8 card listing:
Master Section Listing:
Professional Staff Listing:
7-12-15 printout (validity and interpretation):
Additional comments:

There were no additional comments recorded for this question other than those mentioned in connection with questions 10 through 14.

17. Future Improvements: If we were to combine the stencil and #8 card, what problems do you anticipate in sorting and/or use?

Even though this proposed modification was explained by the consultant, the impression was received that the principals did not fully grasp its significance and implications. No problems were anticipated at the time of the interview. All principals expressed a desire to combine and eliminate as many cards as possible thus simplifying CardPac procedures.

18. Do you understand the #2-#8 card procedure?

There were no problems experienced or anticipated in the #2-#8 card procedure.

19. Manual: Did you find this year's administration manual easy to use ---did it give you sufficient information regarding the system in general?

This year's manual was a distinct improvement over last year's. In general, it was a satisfactory manual.

Were the specific instructions for each task complete and easy to use?

None of the principals would go so far as to say the instructions were complete and easy to use. All said the manual was improved over last year's.

Did you supervise all phases of CardPac or did your office staff do much of the work?

All principals responding to this item did supervise all phases. Those in the larger schools delegated much of the work to staff but made a final check before shipping material to the processing center.

Would packing lists and/or illustrations separate from the manual aid the processing of your material?

All indicated that the inclusion of illustrations greatly improved the manual.

Would your processing have been smoother if more (or fewer) specific problems had been given?

All principals reported that the manual was complete (detailed) enough.

In this manual the tasks were arranged chronologically. Would you have preferred that they be arranged by card?

A negative answer was received to this item.

Additional Comments:

Pictures of specific cards and diagrams illustrating correct gridding practice would aid in manual interpretation. These illustrations should be liberally placed throughout the manual.

Conclusion

At the end of each week's visitations in the field, the consultants reported back to the individuals on the planning committee. At all times a constant feedback of the findings to the committee was maintained.

1. Send out the Curriculum and Professional Staff lists in August and expect their return by September 1. At the same time collect the pupil N-counts by grade from the schools. The cards and lists in the first CardPac shipment could consequently be prepared from the most accurate and up-to-date information possible.

2. Retain the present format and organization of the administration manual but include many more illustrations.

3. Budget more consultant time and money for evaluations. From the consultant's standpoint the visitations to the schools cleared away many ill feelings about CardPac. When the school administrator can sound off about CardPac in a face-to-face interview and in turn the system can be explained, the administrator's attitude toward CardPac can be greatly improved. By the time the consultants left the building, all the principals expressed a great appreciation for the visit.

VII

ANALYSES AND CONCLUSIONS

The four objectives of the Educational Information Project as listed in the project proposal will be presented in this section, accompanied by a discussion of the major accomplishments in each area and certain analyses and conclusions.

First Objective

The first objective listed was development of instruments and procedures for collecting information about all aspects of the educational program for the total population of elementary schools, including information about individual pupils, school personnel, school buildings, and school districts.

Pupils and professional staff members in 1,097 of the state's 1,260 public elementary schools were identified during the first full-year cycle of the Elementary Pupil Accounting System in 1966-67. Materials either were not received from the remaining 163 schools, were received too late to process, or were in a shape making it impractical to attempt to process the information.

The Elementary Pupil Accounting System differs from the CardPac System used at the secondary level in that less information is collected about the elementary pupil and his school. In the spring of 1966, elementary schools provided or verified pupil name, grade, birth date, and sex in the initial administration of the system. The system was expanded slightly during 1966-67 to include collection of additional pupil data, namely, occupation of parents and pupil enrollment and attendance data.

Initially, pupil information was collected on an 8 1/2-by-11 Elementary Pupil Accounting List which had to be completed manually. However, during 1966-67, optical scan cards that could be "read" by machine were used to gather information on all pupils except those in kindergarten. The 8 1/2-by-11 list was still used to record information about the latter children. This list provides space for teacher name, Social Security number, school name and code, room number, pupil name, birth date, and sex. Twenty-six pupils could be entered on a single list.

Curriculum and professional staff data also were collected as part of the statewide information system.

Pupil Data

Information collected and/or verified on individual pupils in each school included, as mentioned previously, name, grade, birth date, sex, parents' occupations, and enrollment and attendance data. An "Assigned Pupil Information List" was sent to each school at the start of the academic year. This printout, in alphabetical sequence by grade, contained the information "on file" about each pupil. If mistakes were made on this list, a Pupil Information Card #2 was used to record corrections, additions, or changes. These cards also were used to enter a new pupil into the system. This card, the same one used at the secondary level, can be "read" by an optical scanner, which converts pencil marks into information recorded on magnetic tape. The computer provides the transition between the magnetic tape and the printed page which is fed back to the local schools.

An optical scan Enrollment Information Card #8, also used at the secondary level, provided the following enrollment and attendance information on each pupil: district code, school code, pupil name, sex, grade level, entry code, day of school entered, day of school dropped, homeroom, educational classification (regular education resident, regular education non-resident, special education resident, special education non-resident), total days absent, birth date, previous school building attended, previous school district attended, pupil number from previous school, and pupil accounting codes (completions, original entry, reentry, transfers, dropouts). Essentially, the Enrollment Information Card indicated enrollment changes and attendance information for all pupils in a given school. An Unassigned Enrollment Information Card List provided, in numerical sequence, unassigned pupil numbers available for a school's use in entering new pupils throughout the year. It was used as a check for available pupil numbers.

Professional Staff and Curriculum Data

The name, Social Security number, and Staff Code of each member of a school's professional staff were recorded. If this information already was available in staff files available to the Information Center, then the information was reproduced as part of a Professional Staff List for verification purposes at the local level. A Professional Staff Header Card #7 was preidentified for each staff member already on file. Blank cards were supplied for completion by new staff members.

Information about each staff member and his assignments, teaching and non-teaching, was collected by recording information on groups of optical scan cards. The basic staff information on the Professional Staff Header Card #7 included district code, school code, staff code, and staff name. The staff member gridded each subject area which he taught on the back of the #7 card. Choices included: communications (English language arts core, composition, dramatics, English, remedial English, humanities, penmanship, literature and reading combination, literature, reading, remedial reading, speech development, spelling, library arts); foreign languages (French, German, Latin, Spanish, other foreign language); fine arts (art, music appreciation, vocal music, band music, orchestral music, private lessons); mathematics (traditional arithmetic, introduction to algebra, remedial math, modern math); health and physical education (health and safety, health, health and boys' and girls' physical education, boys' physical education, girls' physical education, boys' and girls' physical education, science and health, science); social studies (geography, Iowa history, U. S. history, religion, citizenship and government, social studies, social studies core, safety education); industrial arts (general shop or exploratory industrial arts); business education (typing); special education instruction.

The Non-Teaching Assignment Card #12 provided the following information about each professional staff member: minutes per week and weeks per year involved in supervision; number of pupils; years of experience in this area; room number; period and day met pattern; scope of assignment; level of assignment; subject area of assignment; activity assignment classification; and area of responsibility.

Choices for scope of assignment included: single school or supporting service facilities; more than one school, less than district; district-wide; more than one district, less than county; county-wide; more than one county, less than state; statewide.

Choices for level of assignment included: area vocational school, elementary-senior high, elementary-junior high, elementary-junior-senior high, elementary, junior high, senior high, junior-senior high.

Choices for subject area of assignment included: kindergarten & nursery, driver & safety education, vocational business and office education, trade and industrial education, distributive education, technical education, special education, vocational homemaking, vocational agriculture, general homemaking, general agriculture, social studies, science, physical education, music, math, industrial arts, health, foreign language, dramatics, communications, business education, athletics, art, does not apply.

Choices for activity assignment classification included: chief administrative assignment (superintendent); assistant administrative assignment (assisting in management of policy, planning, and activities); supervision assignment (overseeing and improving of staff performance in transportation, instruction, plant, etc., program); accounting assignment; purchasing assignment; testing assignment; social work assignment; psychologist assignment; school direction and management (principal); assistant school direction and management; attendance assignment; library assignment; counseling assignment.

Choices for area of responsibility included: central office administration (consists of activities which have as their purpose the general regulation, directing, and control of the school system affairs that are systemwide); individual school administration (consists of activities which have as their purpose aiding teaching, improving the quality of teaching, or directing and managing a school or a phase of its educational program); attendance and school social work services; health services; pupil transportation services; operation of plant; maintenance of plant; food services; student body activities; community services; acquisition or improvement of fixed assets.

Staff information gathered on the Pupil Supervision Assignment Card #15 included: number of pupils supervised, day of the week, minutes per week and weeks per year, room number, period day met pattern, pupil supervision assignments (homeroom, study hall, lunch rooms, library, school grounds, school crossings, hall duty), and activities sponsored during the school year (annual, art club, band, interscholastic baseball, interscholastic basketball, camera club, cheerleaders, chorus, interscholastic cross country, debate, DECA, drama club, drill team, FBLA, FFA, FHA, FTA, interscholastic football, foreign language club, future nurses club, glee club, interscholastic golf, GRA, Hi-Y, honor society, international relations club, intramurals, letter club, library club, math club, orchestra, pep club, plays, safety club, school paper, science club, secretarial club, small instrumental groups, small vocal groups, social studies club, interscholastic softball, speech, student council, interscholastic swimming, T and I club, interscholastic tennis, interscholastic track, interscholastic wrestling, Y-Teens, service clubs).

Only a small amount of pupil information was collected during the 1966-67 school year. The philosophy adopted for the elementary system was that only a minimum amount of pupil information would be collected at the start, with additional items added each year. It was felt that collecting any more information would create too much of a burden not only on the younger pupils but the teachers and clerks, who would have to supply most of the information. The curriculum and staff files created during the 1966-67 school year were comprehensive, providing much information needed for State Department of Public Instruction reports.

Based on first-year results, this "go-slow" philosophy regarding collection of pupil data was a wise one to pursue at the elementary level in installing a new information system. The addition of a number of new items each year should create only a minimum of additional clerical work at the local level.

Second Objective

The second objective listed was the development of a bank of educational information through data-processing techniques and systems. This bank will transcribe, integrate, and store information centrally for purposes of research, evaluation and service at the national, State, and local levels. Each item of information collected at the elementary and secondary levels in three educational tracks--pupils, staff , and curriculum-has been transcribed, integrated, and stored on magnetic tape in a central location. The use of optical scan cards in collecting this information bypasses the time-consuming procedure of keypunching in that the items of information gridded on optical scan cards can be transcribed directly to computer tape by optical scan machines developed at the Measurement Research Center.

Third Objective

The third objective listed was the development of computer programs and data processing systems for selecting, reducing, organizing, and disseminating the educational information needed by schools and other educational agencies to perform their basic functions more effectively. This includes retrieval of data in forms necessary to provide baseline statistics.

Computer programs for retrieval of data mentioned in the second objective were written in Autocoder for the IBM 1401 Computer.

During 1966-67, the CardPac System of Educational Accounting provided the following local school reports for the State Department of Education: (1) Program Accounting A and B; (2) Attendance Report; (3) Dropout Study; (4) Pupil Activities Report; and (5) Graduate Follow-Up Report. Two feedback reports were provided for local schools, "Analysis of Pupil Inventory Responses" and "Relationships for Selected Items." Both were based on pupil responses to a 37-item Pupil Inventory questionnaire administered in the spring of 1966. Information in the data bank also was used to make in-depth studies of Iowa Head Start and Title I programs. In addition, graduate students at The University of Iowa utilized the data bank in meeting requirements for Ph. D. Degrees and many university staff members conducted studies based on the data.

Fourth Objective

The fourth and final objective listed was the implementation of the second administration of the Secondary CardPac System described in detail under a proposal submitted April 7, 1964,to the U. S. Office of Education and designated Cooperative Research Project No. E-031.

Refinements of the CardPac System based on 1965-66 experiences contributed to much smoother operation during 1966-67. Schools were more cooperative, apparently beginning to realize benefits from the system; there were fewer deadline problems, especially in returning materials at the end of the school year; and less editing of the returned materials was needed at the Processing Center. Many of these improvements can be traced to the 56-page Administration Manual, which contained numerous illustrations.

VIII

DISSEMINATION

Major dissemination efforts during the funding period included publication of prepared news releases and articles for newspapers, television and broadcasting media; books; and periodicals. In addition, staff members participated in conferences and briefed guests.

List of IEIC Guests

The list of guests who visited the Iowa Educational Information Center and received detailed presentations on Center activities included the following:

Dr. Dale Tillery, project director for SCOPE and a representative of the Center for Study of Higher Education, Berkeley, California; Miss Karol Karrens, programmer representing the Center for Study of Higher Education; Mrs. Janet Ruyle, California Center representative who is responsible for articulating projects with data processing; Dr. Donald Anderson, University Council for Educational Administration.

Ray DeFeo, Dan Vitello, James DePaso, Miss Angie Pappas, Dick Eby, and Merritt Lindsey, all representing the Board of Cooperative Educational Services, Bedford Hills, New York; John Roberts, IBM, New York; Michael D. Penisten and Claude Fristoe, representatives of the Business Systems Markets Division of the Eastman Kodak Company; Dr. William G. Katzenmeyer, University of Wisconsin; Barbara Rosenquist, System Development Corporation, Santa Monica, California; Jim Gallagher and William Schell, University of Illinois; Ken Shibata, operations director and coordinator for the research coordination unit, University of Nebraska; Michael Munger, programmer, University of Nebraska.

Miss Reiko Tsumura, Comparative Education Research, Ministry of Education, Tokyo, Japan; Sixto Morales, consultant with the Puerto Rico State Department; Edith Munoz, IBM systems engineer, San Turce, Puerto Rico; Eduardo Revira, secretary of education, Puerto Rico; Arthur Kroll, Dr. Joel Berg, and David Clemens, Newton, Massachusetts, Data Processing Center for Pupil Personnel; Dale Hall, director of the Indiana University Computer Center; William Chilters, Indiana University College of Education; William G. Savard, assistant superintendent, Hawaii State Department of Public Instruction.

Dr. A. J. Koenig, specialist, Division of State Agency Cooperation, U. S. Office of Education; Eugene Kennedy, systems coordinator, ERIC, Division of Research, Training, and Dissemination, Bureau of Research, U. S. Office of Education; Allan Lichtenberger, head, Data Compatibility Group, Division of Data Sources and Standards, National Center for Educational Statistics; Frank Cardinale, contract negotiator, Contracts and Construction Service, U. S. Office of Education; Glenn C. Boerrigter, research coordinator, Research Branch, Division of Elementary and Secondary Research, U. S. Office of Education.

Dr. Robert Granger, Assistant Superintendent of Schools, Wayzata, Minnesota; Mrs. Sherman Watson, president, Iowa Parent-Teachers Association; Dr. Ward Mason, director of research and development center program, U. S. Office of Education; Dr. David Clark, associate dean, College of Education, Ohio State University; Dr. Wayne Holtzman, dean, School of Education, University of Texas; Dr. Paul Lazarsfeld, professor of sociology, Columbia University; Dr. Ralph Tyler, director, Center for Advanced Study in the Behavioral Sciences, Stanford, California.

Charles F. Croley, coordinator of data processing, Denver Public Schools; Yasuo Matsushita, National Institute of Educational Research, Tokyo, Japan; Dr. Robert Bierre, Monroe Community College, Rochester, New York; Dr. C.M. Bridges, Jr., University of Oklahoma College of Education; Dr. Robert McAdoo, professor of educational administration, Kansas State Teachers College, Emporia, Kansas; Don Wilson, graduate assistant, Kansas State Teachers College, Emporia, Kansas.

Henry G. Macintosh, deputy secretary of The Associated Examining Board, Aldershot, Hampshire, England; Dr. Maurice Shapiro, New York State Department of Education; Dr. John Torosian, Massachusetts director of the New England Educational Assessment Program; John Bremer, New England Educational Assessment Program; Dr. Henrick Voldal, principal researcher in a Title V study, University of North Dakota; Lowell Elisha, Colorado State Department of Education; Howard Kaye, Litton Industries.

Dr. Dale Chismore, U.S. Office of Education; Dr. Henry Chauncey, president of Educational Testing Service, Princeton, New Jersey; M. Richard Maxfield, director of data processing, Utah State Board of Education; Dr. Gordon Cawelti, executive secretary, North Central Association of Colleges and Secondary Schools; Michael M. Opiala, director, data processing and systems, Cooperative Educational Service Agency 12, Portage, Wisconsin; Earl Chandler, data processing manager and consultant for the Wisconsin Department of Public Instruction; Paul Nachtigal, director, ESEA Title III, Boulder Valley School District, Boulder, Colorado.

J.W. Tonks of Project OTIS, Eugene, Oregon; Mrs. Linda Scovill, publications manager, New England Education Data Systems; Pansy Puckett, director of pupils, Magnolia, Arkansas; Lowry M. Bennett, director of Project OTIS, Eugene, Oregon; Mary Ann Dawe, research librarian, Midwestern States Educational Information Project; Haydn V. Wright, senior research engineer, U.S. Steel Corporation's Applied Research Laboratory, Monroeville, Pennsylvania; Dr. Robert Den Hartog, assistant superintendent in charge of business affairs, Lincoln (Nebraska) Public Schools.

Dr. Otto Peters, specialist with the Berlin Educational Center; Jim Eanes, University of West Virginia; V. Zeres and John Phillips, Canadian principals; Joan Gough, programmer analyst at Ontario (Canada) Institute; Sam Bliss, director, Midwestern States Educational Information Project.

Walter G. Nelson, director of research and guidance for the Gadsden City Schools, Gadsden, Alabama; Ralph McConnell and Gerald Fastman, Computer Usage Corporation; Larry Efird, Arnold Bochner, Gary Hill, and Jim Ford, IBM representatives from Puerto Rico; Robert E. Read, director of personnel services, Fountain Valley School District, Huntington Beach, California; Alan Dye, business manager, Peoria, Illinois; Ray L. Talbert, director, The Oregon Compact, Title III, ESEA, Salem, Oregon; Dave Stanard, Stanford University.

Wendel Scarbrough, director of data processing, Albuquerque Public Schools, Albuquerque, New Mexico; Pete Echell, manager of systems and programming, Albuquerque Public Schools, Albuquerque, New Mexico; Robert England, director, Coteau Hills Resource Center, Ellendale, North Dakota; Edward Krahmer, director, Bureau of Educational Research and of the Educational Research Training Program at the University of North Dakota; Richard Kunkel, Vernon Dravland, and Gordon Rholl, Felows in Educational Research at the University of North Dakota, Grand Forks, North Dakota.

William Sperling, staff member of the School of Education's School Information System, the University of Wisconsin; Dr. Robert S. Buddy, institutional research specialist, University of Pennsylvania; Dr. Thomas F. Caton, Jr., Dr. Milford A. Johnston, and Dr. Wallace Burns, General Learning Corporation, Washington, D.C.

Conference Participation

Conferences, workshops, or meetings in which IEIC personnel participated:

Iowa Association of Educational Data Systems, Des Moines, Iowa; Iowa Guidance Leadership Conference, Iowa City, Iowa; UCEA Task Force on Operations Research and Systems Analysis, Minneapolis, Minnesota; Iowa Association of School Administrators, Ames; City Superintendents' Conference, Marshalltown, Iowa; School Facilities Council, Ames, Iowa; National Association of Secondary School Principals, Cleveland, Ohio, and Dallas, Texas.

American Association of School Administrators, Atlantic City, New Jersey; American Educational Research Association, Chicago and New York City; Sub-Task Force Conference on Upper Midwest Regional Educational Laboratory, Minneapolis, Minnesota; North Central Association of Colleges and Secondary Schools, Chicago; Mid-Continent Regional Education Laboratory, Kansas City, Missouri; Iowa Association of School Business Officials, Des Moines, Iowa; National Council of Schoolhouse Construction, Boone, Iowa, and Palo Alto, California.

UCEA Task Force Seminar on Institutional Roles for In-Service Education of School Administrators, Albuquerque, New Mexico; National Association of Educational Data Systems, Detroit, Michigan; National Conference on State Educational Information Systems, Iowa City, Iowa; Local and County Superintendents Workshop, West Lake Okoboji, Iowa; Conference on Flexible Scheduling for Secondary Schools Through Computer-Built Master Schedules, Iowa City, Iowa.

National Conference of Professors of Educational Information, Bloomington, Indiana; Northeastern Educational Assessment Project, Boston, Massachusetts; Workshop on Research and Evaluation in Education, Columbus, Ohio; Association of School Business Officials, Atlantic City, New Jersey; Midwestern States Educational Information Project, Pierre, South Dakota, Des Moines, Iowa, and St. Louis, Missouri; Systems and Procedures Conference, Des Moines, Iowa; Workshop Series on Technology and Education, Washington, D. C.

School Administration and Supervision Conference, Iowa City, Iowa; U. S. Office of Education Dissemination Conference on Developments in Educational Information Systems, Washington, D. C.; Iowa Guidance Leadership Conference, Iowa City, Iowa; American Association for Colleges of Teacher Education, Chicago; Regional Educational Research and Development Council, St. Cloud, Minnesota; Workshop on Instructional Programs in Data Processing in Secondary, Technical Schools, and Colleges, Iowa City, Iowa.

Invitational Title I Planning Conference, Washington, D. C.; Coordinating Committee for the Improvement of Education in Iowa, Des Moines, Iowa; Joint Conference on Information Science of ERIC and American Personnel and Guidance Association, Dallas, Texas; Florida Association of Educational Data Systems, Boca Raton, Florida; IBM School Information Systems Roundtable, Washington, D. C.; Iowa Association of School Business Officials, Sioux City, Iowa; Iowa Personnel Guidance Association, Des Moines.

Research Institute for State Educational Agency Personnel, Denver, Colorado; UCEA Articulated Media Project Dissemination Seminar, University of Chicago; IBM Customer Executive Class for Deans of Colleges of Education, San Jose, California; CAI Conference, Washington, D. C.; Data Processing Conference, East Lansing, Michigan; Seminar for Managers of Technical Information, Iowa City, Iowa; First District Conference on Elementary and Secondary Education.

Published Articles

In addition to manuals and brochures which were disseminated, articles written by IEIC staff members appeared in state and national publications. These are presented in detail in the Bibliography.

Dissemination efforts also included conferences at IEIC with individual school administrators from local Iowa schools and visitations to schools experiencing trouble with the CardPac System of Educational Accounting. From a public relations standpoint, the visitations were extremely valuable, accomplishing a two-fold purpose:

1. Solving administrative problems at the local level, and

2. Creating rapport between the Center and the administrator in the field.

Educators, others in education-related fields, vendors, and additional Iowa Educational Information Center guests were given in-depth briefings on Center activities, with the briefings tailored to the individual's interest. Presentations sometimes lasted several days and included slides, tours of IEIC and University of Iowa facilities, and individual conferences with staff members.

The slide presentations were prepared by the Center's audio-visual department and included overviews and descriptions of individual services. These proved particularly effective, based on "feedback" from those viewing the presentations.

IX

RELATED PROJECTS

A report on the Iowa Educational Information Center would not be complete without brief descriptions of its many education-related projects, some of which eventually could be incorporated into the statewide information systems. Some of these projects are in the developmental stage while others are operational.

Facilities Accounting

Systems work on a Property Accounting Project to be used on a pilot basis has been completed and test runs made, and the project is expected to be operational in the summer of 1967.

In addition the Center is developing a six-digit equipment coding structure which is expected to facilitate collection of data.

The following items of information will be collected as part of the pilot Property Accounting Project:

A. Sites

1. Identification

    (1) Number--assigned by district
    (2) Date--month and year
    (3) Transaction Code--acquisition, deletion, site improvement
    (4) Type of Ownership--public school, private, other public
    (5) Type of Site--elementary school, maintenance, athletic field, vacant, etc.
    (6) Area--in tenths of acre
    (7) Cost--may be estimated
    (8) Deed Recording Data--year, county number, volume, page
    (9) Location--probably an address

2. Improvement

    (1) Transaction code
    (2) Date
    (3) Cost of Improvements--by detail if possible; if old, a total:

        a. parking and drives
        b. passageways and walks
        c. water and sewer
        d. electric
        e. other outdoor
        f. surface play area
        g. play equipment
        h. fences and walls
        i. landscaping
        j. miscellaneous
        k. total improvement costs

B. Buildings

1. General Information

   (1) Site No.
   (2) Bldg. on that site (oldest first)
   (3) Building name
   (4) Use of building
   (5) School or district function
   (6) Rated pupil capacity, if applicable
   (7) No. fire alarm boxes
   (8) No. call boxes
   (9) No. sprinklers
   (10) No. heat-smoke detectors
   (11) No. hose cabinets
   (12) No. fire extinguishers
   (13) No. elevators
   (14) Transaction code

2. Building Section Information

   (1) Section--original, first, addition, etc.
   (2) Ownership
   (3) Availability
   (4) Mobility
   (5) Area (gross)

      a. basement
      b. first floor
      c. other floor
      d. total

3. Building Section Information

   (1) Costs of building by section

      a. general
      b. mechanical
      c. electrical
      d. architect-engineer
      e. legal
      f. consultant
      g. miscellaneous
      h. total

   (2) Type of construction
   (3) Number of floors
   (4) Type of heat
   (5) Fuel used
   (6) Extent of cooling
   (7) Type of ventilation
   (8) Source of water
   (9) Type of sewage system
   (10) Electrical system
   (11) Type of communications
   (12) Radio and television
   (13) Fire rating

4. Individual Spaces

   (1) District, site, building, and section designation
   (2) Transaction code
   (3) Room number
   (4) Room type
   (5) Area
   (6) Floor construction
   (7) Wall flexibility
   (8) Ceiling construction
   (9) Area of chalkboard
   (10) Area of tackboard
   (11) No. electrical outlets
   (12) Type of lighting
   (13) No. gas outlets
   (14) No. of lavatories and sinks
   (15) No. of urinals
   (16) No. of drinking fountains
   (17) Type, area, and no. of adjacent spaces
   (18) Built-in equipment--type and no.
   (19) Present value

C. Equipment

1. Individual and/or Group

   (1) Identification--district and school or function
   (2) Tag, social or group no.
   (3) Equipment code
   (4) Ownership
   (5) Description
   (6) Life expectancy
   (7) No. of units
   (8) Date of purchase--month and year
   (9) Purchase order or invoice no.
   (10) Total cost
   (11) Transaction code

Payroll Accounting

The Center has developed an automated School Payroll System, not yet operational, which has four objectives:

A. To implement an automated school payroll system as a first step towards development of a completely computerized Uniform Financial Accounting System for Public Schools.

B. To standardize payroll data between schools as much as practical for uniformity of information resulting in more meaningful reporting of results of operations.

C. To develop a system which can be used by various Area Community Schools for processing of public school payrolls, regardless of size, within their districts.

D. To reduce the clerical work load associated with preparing payrolls and financial reports.

The School Payroll System is designed to use punch card input, magnetic tape for file storage (four tape units), a line printer and card punch for output, and to be processed on an IBM 1401 data processing system (8,000 characters of core storage minimum).

Forms are prepared by the various participating school district business offices to provide input data to the payroll system. At a predesignated reporting date, the district offices forward the prepared materials to the data processing center where the data are keypunched into cards. The deck of transaction cards created is then converted to magnetic tape and sorted into the proper order for processing. The basic order of all processing is by Social Security number (which is used as an employee identification number) within school district.

When processing by the data processing center is completed the following materials are returned to the various district offices for reviewing and distributing to the appropriate people.

A. Transaction Journal--a listing of individuals by school district showing all transactions for that individual in the current pay period. Transactions consist of master record changes such as change of name, address, marital status, annual salary, elective deduction amounts, etc., as well as current period items such as hours for hourly employees, deductions for unauthorized absences, etc.

B. Payroll Journal-Warrant Register--a listing of individuals by school district with all current payroll items including Social Security number, employee name, warrant number, regular pay, extra pay, pay loss, federal and state income tax withholding, FICA and IPERS withholding, net pay, and various elective deductions.

C. Payroll Master Record Changes--a listing of individuals by school district showing any master record changes to be filed with the employee's permanent master data sheet.

D. Payroll Warrants, Deposit Slips and Earnings Statements--deposit slips or warrants for each individual depending on whether the employee wishes his salary to be deposited directly to his bank or a warrant drawn which can be either mailed to him or delivered to the school where he works.

E. Calendar Year-to-Date Totals--a listing of individuals by school district reflecting each employee's calendar year-to-date accumulations of all payroll items such as gross pay, net pay, tax withholdings and elective deductions.

F. Fiscal Year-to-Date Totals--a listing of individuals by school district with fiscal year-to-date accumulations of all payroll items. Examples of items shown are gross pay, pay loss, net pay, required withholdings, and elective deductions.

G. Payroll Charges by Account--a listing of individuals by account within school district. This report is used to show the charges of gross pay to the various payroll accounts and to compare those charges to the previous pay period similar charges for the purpose of indicating any changes which can then be verified as correct or incorrect.

H. Board Report of Salaries--a listing by district and account of the various payroll charges in the current month, year-to-date charges, annual budgeted amount, encumbered amount, and free balance. The format has been designed to follow the suggested Secretary's Financial Report as outlined on page 46 of the Uniform Financial Accounting for Iowa Schools Research Bulletin No. 1000.

After receipt of the output data by the district offices, the material is reviewed and any corrections necessary are made and reported to the data processing center for updating of the magnetic tape file. The school district office then signs and distributes the warrants and deposit slips.

At the end of the calendar quarter the updated payroll master file is used to prepare the IPERS and FICA Quarterly Report. In addition a complete listing of each individual's payroll master information is produced for use as a reference.

Upon completion of the final payroll in the calendar year, the payroll master record is used to prepare W-2 statements of withholding for distribution to the employees. The areas of the master record reserved for accumulation of calendar year-to-date totals are then cleared so the next year's totals may be collected.

When the fiscal year is completed at the end of June, fiscal year totals are available for publication as required by law. Additional reports may be developed using the information contained in the payroll master file as needed.

In developing this automated school payroll system an attempt has been made to allow for later integration with other school financial accounting functions, personnel accounting and property accounting. By standardizing input forms and output reports, information available will be comparable between school districts. As a result of designing the system for the IBM 1401 machine configuration listed above, the system should be applicable to most area community schools possessing computers since it appears this is the type of computer most of these schools now have or will be receiving. Attempts were made, in designing the system, to automate as much of the payroll calculation as practical in order to relieve the school district offices of the time-consuming clerical duties involved in preparing a payroll.

Computer Scheduling

Seventy-nine schools with a total pupil population of 70,000 were scheduled by IEIC for the 1966-67 school year with the aid of a computer. In addition, the program developed by IEIC was used to schedule 11,000 pupils in 11 Wisconsin schools and 13,000 pupils in 13 New York schools.

The service, available to schools in Iowa and outside the state on a subscription basis, offers pupil directory information; conflict matrix; master section list; error list; class loading report; homeroom, grade, and school rosters; schedule cards; list of sections taught each period of the day; list of pupils requesting each course; preliminary schedules; class lists; homeroom lists; class rosters; study hall lists; and a continuous form listing of all pupil schedules.

Scheduling can be accomplished by block time, varied period, revolving, or conventional master schedules.

The system offers four distinct advantages not generally available: (1) educational data processing consultants with experience as school administrators to assist principals in scheduling; (2) a commitment to provide the best possible schedules without specified limitations on the number of individual course request changes needed; (3) capability to hold pupils in groups and/or subgroups for a series of classes or activities; and (4) an on-going research program to improve the educational services to local schools.

The Center's scheduling consultants, in cooperation with Stanford University, have introduced the Stanford School Scheduling Program to schools in Iowa and Wisconsin, actually scheduling Pleasant Valley, Iowa, and Delavan, Wisconsin, schools with the Stanford program. The Center is working with other schools in the planning stage.

Schools have shown a great deal of interest in the flexible scheduling program, which offers extensive use of large-group lectures, team-teaching, small-group discussions, long periods of laboratory time, and the opportunity for independent study. In flexible scheduling, the computer actually builds the master schedule.

Attendance and Mark Reporting

IEIC provided an Attendance and Mark Reporting Service on a subscription basis to 25,000 pupils in 57 schools during the 1966-67 school year. An additional eight schools with 10,000 pupils used the IEIC system as administered by another agency.

The periodic reporting of pupil attendance and marks has traditionally imposed routine clerical work on teaching personnel who should better use the time for teaching, study, or class preparation. The application of modern computer technology now makes it possible to relieve school staffs of much of the clerical detail that occurs at each reporting period. The IEIC Attendance and Mark Reporting Service features an efficient method of reporting data by the school staff, machine-processing of the data and preparation of reports, and additional feedback of compilations and summaries for analysis and evaluation by the principal.

The Service offers non-returnable pupil report forms for the parents plus two copies for school use; class lists with cumulative pupil marks for teachers, counselors, and principals; anecdotal remarks from teachers to parents; computed mark-point averages and rank-order lists; frequency distributions of pupil marks by teacher, course, and schools; attendance summaries for pupil report forms, office use, and State reports; and pressure-sensitive pupil attendance and mark labels. Attendance records provide the principal with data for preparation of the State Department of Public Instruction Average Daily Attendance Report.

Student Ranking Service

The Student Ranking Service, another subscription service offered to local schools, evaluated 3,167 pupils in three Iowa schools for ranking purposes during the 1966-67 school year.

Evaluation is made according to selected attributes for differential grouping into sections so that instruction can be more closely tailored to the majority of pupils, and course marks can be assigned more objectively within the sections.

Modern education often calls for the placement of pupils into categories with respect to homogeneity on a number of measured attributes. "Ability grouping" is one such example of categorizing pupils, usually in respect to measured potential to master specific course material. Assignment of course marks based on test marks within the courses is another example.

The computational tasks involved in evaluating each pupil on a number of measures for differential grouping often result in abandoning a careful evaluation scheme in favor of one that is less exact but more expedient. Thus many educators have expressed their need for a defensible and reliable method of ranking pupils without exceeding limited time and money resources.

The Iowa Educational Information Center has developed a Student Ranking Service (SRS) which employs the modern digital computer to do the routine computational tasks involved in evaluating pupils on multiple variables and assigning each pupil a respective rank. SRS also produces as a by-product summary statistics useful to school personnel engaged in other pupil evaluation or guidance procedures.

The Student Ranking Service is designed to utilize data already available through the statewide CardPac System of Educational Accounting, the Iowa Testing Programs, and other IEIC subscription services--Computer Scheduling and Attendance and Mark Reporting. This enables the school to take advantage of the SRS program with a minimum of additional data collection.

The Student Ranking Service enables the principal or guidance counselor to evaluate pupils for placement in various course sections according to measures established on the basis of past experience or as a result of a statistical analysis such as multiple regression. Some of the more frequent measures used are:

1. Sub-tests or composite scores of the Iowa Tests of Educational Development.
2. Prior course marks.
3. Intelligence test scores.

4. Differential aptitude test scores.

5. Teacher recommendations.

6. Special area tests such as the Coop English Test, Iowa Algebra Aptitude Test.

7. Interest measures such as Kuder Preference Schedule, Strong Vocational Interest Blank, etc.

The goal of the Student Ranking Service is to provide the means for determining a pupil's relative rank within a group based on measures which are definable on a numeric scale. SRS ranks pupils in appropriate groups according to specifications set forth by the local school system. SRS does not establish the criteria on which to base this ranking. Schools utilizing the Ranking Service must answer the following questions:

1. Which pupils are to be ranked?

2. What measures or variables are to be used in evaluating rankings in each group?

3. How much weight is to be given each measure used?

4. Which pupils are to be evaluated for which groups?

The counselor or principal specifies data to be prepunched into Group SRS Identification Cards and Student SRS Data Cards, and then completes the cards by filling in additional information.

The Group SRS Identification Card provides space for identifying a course in which pupils are to be grouped and space for variable weights or multipliers to be used in ranking pupils in the course. One card is completed for each group in which pupils are to be ranked.

The Student SRS Data Card provides space for identifying up to six groups in which the pupil is to be ranked and scores made by the pupil on the variables to be used in ranking. One card is completed for each pupil to be ranked.

Student ranking can be performed at any time, but principals who plan to use it as an aid to scheduling should submit a request by December 1 and complete a planning conference by December 15. The ranking process can then be completed by February 1 in time for application to the fall pupil scheduling.

SRS has been developed as a means of reducing mundane computational tasks in the process of ranking pupils on a number of measures. It is hoped that it will provide an incentive for improving the practice of grouping pupils by ability as well as provide a useful means of evaluating pupils for other purposes.

Title I Evaluation

Characteristics associated with all Title I, ESEA, projects in Iowa have been analyzed by IEIC in cooperation with the State Department of Public Instruction. A comparison of programs, pupils, professional school personnel, and facilities was made at the conclusion of the 1966-67 school year and will be repeated at the close of the 1967-68 school year.

Several meaningful generalizations were apparent from the first-year study:

A. The distribution of Title I monies indicates the rural nature of the State.

B. More than 95 percent of the eligible districts participated in the programs.

C. The distribution of grant monies and the ratio of administrative personnel to teaching and other specialized professional staff presented a favorable picture.

D. Perhaps the most significant shortcoming of the initial programs was their lack of comparable involvement at the preschool and early elementary levels.

E. There was a preponderance of remedial reading programs.

F. During the first year of Title I operation, educators did identify and treat under remedial programs the majority of those children who were identified as "educationally deprived."

Analysis-of-Changes Service

Related, but only indirectly, to the Title I Evaluation project is an Analysis-of-Changes Service offered by IEIC on a subscription basis. This service is designed to meet the needs of local schools in performing evaluations of local projects such as those funded under Title I, ESEA.

Frequently, the local school district does not have personnel with the qualifications necessary to do statistical analysis, nor does it have computing facilities or time available to carry out the substantial computations which must be completed for the proper evaluation.

By carefully following procedures described in the Analysis-of-Changes-Service Manual, the local school administrator lacking specialized training in statistics may learn how to successfully complete an evaluation analysis for Title I projects and other projects carried on in the local school.

School Census

IEIC personnel served as consultants to the Cedar Rapids and Council Bluffs, Iowa, school districts in preparation of automated census-collection procedures.

Preprinted mark-sense data-collection cards were used in 1966 in verifying the following information collected in 1964: child's name, address, telephone number, zip code, sex, birthplace, public elementary district living in, school attending, handicap, grade, birthdate, township, section, area, and block. Blank cards were used to record information for people not already on file. Data were processed by the Measurement Research Center of Iowa City and the Cedar Rapids School District.

Interagency Case Information Service (ICIS)

All preliminary problems have been resolved and planning completed for the Interagency Case Information Service, a statewide system of informational exchange among State agencies who are entrusted with the care and treatment of Iowa's intellectually handicapped of any age or degree of disability.

ICIS provides useful case information on the intellectually handicapped individual to each of the participating State agencies whenever the client is presented to them for help. The information is stored in an automated data system, which includes such general information as age, residence, a sketch of the family's structure, medical examination records, and psychological testing results. Once this information is obtained on an individual by any of these agencies, it will be available to all other agencies within the system when they have a need for it in order to help a client. The time-consuming and often expensive process of social, psychological, and medical evaluations will not need to be repeated each time a client goes from one agency to another, and each agency will profit from the knowledge and experience of each previous agency contact with the client.

An interim manual information system was functioning in the summer of 1967, with case histories being received regularly and updates, changes, and retrievals processed as required.

Among future plans is a feasibility study of the terminal concept for both remote and routine on-site operations.

Participating in the data system are operating divisions of the Board of Control, Iowa State Department of Health, State Department of Public Instruction, State Board of Regents, and Department of Social Welfare. These include such facilities as local special education offices, county welfare offices, the diagnostic clinics at The University of Iowa, the state hospitals and schools for the retarded, county public health nurses, district offices of vocational rehabilitation, and the Des Moines-Polk County Center for Mentally Retarded Children.

Advisory Committee on Statewide Data Systems

The Advisory Committee on Statewide Data Systems, consisting of two superintendents, three principals, two guidance counselors, and a supervisor of research and statistics, met monthly during the 1966-67 school year to scrutinize data-collection forms and procedures used by the State Department of Public Instruction.

Suggestions for improvement are communicated to appropriate personnel in the State Department.

North Central Association of Colleges and Secondary Schools

IEIC, in cooperation with Measurement Research Center, processes and analyzes data collected in the member survey conducted annually by the North Central Association of Colleges and Secondary Schools.

IEIC also processed and analyzed 7,142 questionnaires returned by selected secondary schools as part of an NCA innovative study. A total of 10,000 questionnaires had been distributed.

Iowa Professional School Employees Data System

The Iowa Professional School Employees Data System is an automated procedure developed by the Iowa Educational Information Center and the State Department of Public Instruction for the purpose of collecting data on each professional employee in all Iowa public and private elementary, junior high, and senior high schools, junior colleges, area vocational schools, area community colleges, special education classes or schools, and county and state departments.

The following data were collected or verified on a three-part form during the 1966-67 school year: county number, district number, home school number, Social Security number, folder number, name, total hours of credit earned, undergraduate major, graduate major, highest degree held, year the highest degree was received, institution from which the individual graduated, salary, subject and grade level assignment, title and previous titles held, contract period, marital status, sex, previous occupation, semester hours of credit in the area being taught, different schools in which the individual may work, grade or area in which the person may be teaching.

Personnel new to an Iowa school system must fill out a blank form; returning personnel only verify preprinted data collected previously.

X

SUPPORTING FACILITIES

Measurement Research Center

Measurement Research Center (MRC), one of the nation's leading test-scoring and data-processing agencies, serves as the processing agency for the Iowa Educational Information Center. MRC owns, leases, and has access to some of the latest and most sophisticated equipment in the data processing field, including the MRC 1501 Mark Scanner its own engineers developed and which can scan marks and read punched holes simultaneously at a rate of 1,500 cards per minute.

In addition to its scanning devices, MRC has the following computers: IBM 360/30, IBM 1401, IBM 1460, CDC 160, CDC 8090, and NCR 310. Also available for MRC use are an IBM 360/65, an IBM 7044, and an IBM 1401 at The University of Iowa Computer Center.

MRC has an experienced permanent staff of more than 100 test specialists, systems analysts, programmers, engineers, technicians, supervisors, and highly trained clerks. Approximately ten systems analysts and programmers are housed in the IEIC building.

University Computer Center

Equipment, facilities, and personnel of The University of Iowa Computer Center are available. Two large-scale computers--the IBM 360/65 and 7044--are used to process much IEIC data.

College of Education

The University of Iowa's College of Education provides professional personnel and office space for the Iowa Educational Information Center, and members of the faculty contribute professional assistance in specifying kinds of information to be collected.

Several members of the IEIC staff have dual roles as professors in the College of Education and IEIC administrators.

Iowa Testing Programs

The Iowa Testing Programs are the five-to-seven-hour comprehensive Iowa Tests of Basic Skills (grades 3-9) and the Iowa Tests of Educational Development (grades 9-12). Both are non-profit, cooperative projects of The University of Iowa. They are administered annually under closely controlled conditions to almost the entire school population of the State in grades 3-12.

Data collected as part of the Iowa Testing Programs are available to the Iowa Educational Information Center, which has found the data particularly appropriate when merged with pupil responses to a set of questions administered each spring in the secondary grades as part of the CardPac System of Educational Accounting.

State Department of Public Instruction

The State Department of Public Instruction provides personnel and access to its facilities. The Department has traditionally enjoyed unusually good relationships with the public schools of the State, and its support of the data-collection activities ensures that the plan as a whole is an integral part of the legally constituted educational structure of the State.

The director of IEIC also serves as the associate superintendent of systems in the State Department.

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